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A PHILOSOPHICAL TREATISE
ON THE
NATURE AND CONSTITUTION OF MAN.

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A PHILOSOPHICAL TREATISE

ON THE

NATURE AND CONSTITUTION OF MAN.

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THEORY OF THE ARTS,"
ETC.

Γνωθι σεαυτον.

VOL. I.

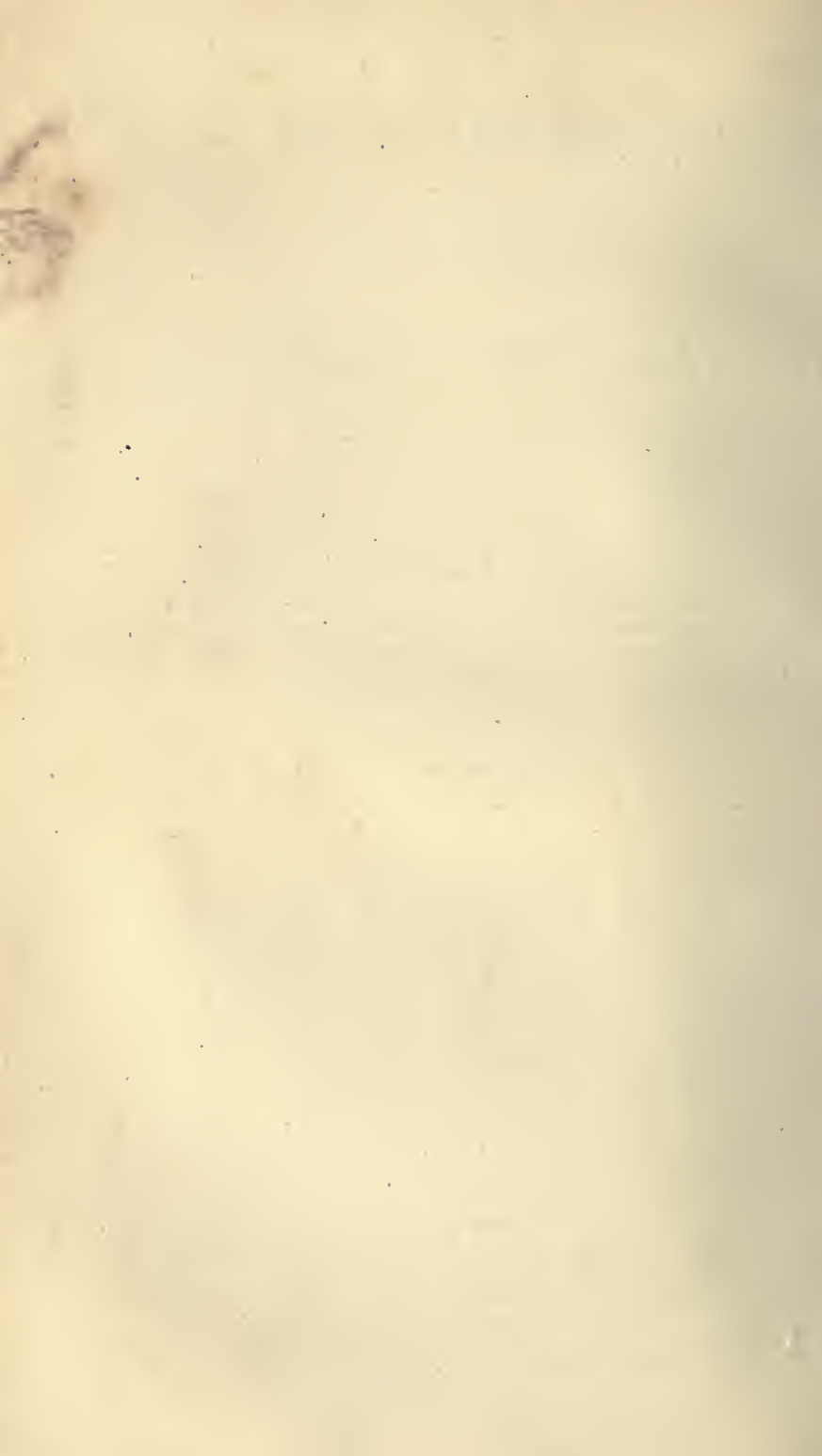
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PREFACE.

THE object of the present work is to afford a comprehensive and complete survey of the nature of man as regards his intelligent being; to exhibit the direct and immediate connexion of each department in his constitution with its corresponding relation; and to demonstrate the uniform mechanism of the whole as one entire and consistent system. Such an undertaking has of course demanded considerable pains in the execution, as well as extensive research and patient inquiry in securing the information necessary to render it in any degree perfect; requiring not only close and reiterated observation of human nature, but also a full acquaintance with the thoughts and theories of those enlightened and penetrating minds which have already laboured earnestly in the same field.

If therefore the subject of this Treatise be deemed too exalted for any but the loftiest genius to attempt;—and through the wide range of topics which the mind embraces, it is impossible to name any at once more vast, more abstruse, or more important;—the author has at any rate endeavoured to make some atonement for his apparent presumption in entering upon it, by devoting to it not merely the occasional leisure of a few years, but the attention and study of the best period of his life. It was commenced during early youth, carried on through manhood, and only completed in his later days. All those literary works of man, like the living works of God, which grow up before our eyes, and are intended to endure, are produced by slow degrees, and by a gradual putting forth of shoots. The mushroom, on the other hand, which springs up in a night, fades in a day. It is, moreover, ordinarily, with literary performances as with animal life, that their existence extends to a period corresponding with that occupied in their growth. He who aspires to have his work, passage by passage, and line by line, quoted and appealed to; must passage by passage, and line by line, consider and compose it: a mode of progression which, although it may ensure the utmost care and attention being devoted to the

subject, is not without its inconvenience and disadvantage, more especially as regards the two opposite dangers of repetition and inconsistency that it entails.

In a treatise which is to a large extent unavoidably speculative, or which possesses any claim to original or independent thought, especially when its composition has extended over a considerable period of the author's life, during which several changes of opinion on each subject embraced must naturally have occurred, if he possessed any reasonable amount of either candour or diffidence; some inconsistencies, and very possibly contradictions also, will almost necessarily be detected. Indeed, a book composed as this has been, nearly resembles one which was written by several independent persons, who each thought for himself, and expressed his own views; and whose main object was the discovery of truth at the risk of occasionally running counter to one another. For a like reason, repetitions of the same sentiment may also here and there occur. That these are defects in the composition of the work, even if they could have been avoided, must be unhesitatingly admitted; however circumstances may be allowed to palliate the errors, and however extensively the same blemishes may be found existent in other performances composed under corresponding circumstances.

The substance of these pages has been drawn mainly from Nature herself, and has been obtained by close and reiterated observation of her manifestations and operations. Their origin arose from the examination of certain principles relating to the condition of man, which at an early period of life engaged the author's attention and interest, which he was induced to follow up, and which by degrees led him to wander into other branches connected with that particular department, until the entire system of man's nature was brought under his consideration.

During the composition of this work, and occasioned by the process of thought carried on while it was in progress, two others have been suggested, and have preceded it as regards their appearance before the public; the present one from its nature necessarily requiring more time and labour for its completion, than they have done. The first of them, entitled *Civilization considered as a Science, in relation to its Essence, its Elements, and its End*,¹ was intended to lay down the principles applicable for the right conduct and highest development of man in the aggregate, when collected into a society or nation; whereas the present treatise deals with man as an individual only, examining the constituents of which he is composed, and considering the

¹ A new and revised edition of this work has lately been brought out, at a reduced price, forming one of the volumes in *Bohn's Library*; and of which more than one edition has been disposed of for circulation in America.

influences that act upon him. The other work, which bears the title of *The Theory of the Arts; or Art in relation to Nature, Civilization, and Man*,² was designed to investigate the nature of the highest capacities with which man is endowed, and to direct their proper application. The three together aim to afford a complete and systematic survey of man in his several relations, as also with regard to the particular capacities with which he is endowed, and the various operations in which he may be engaged.

The present undertaking will be found to differ in its nature and design, from most or all of the books which have preceded it on subjects of the kind on which it treats. The principles contained in it, have been framed entirely from attentive study and observation of human nature; and although not aspiring to be a practical dissertation, yet, being the result of practical observation, it may, to a certain extent lay claim to such a character.

As different indeed have been the sources from which have sprung the ideas that contributed to the constitution of the following work, as were the pursuits, and localities, and occupations of the author during its progress. Sometimes in the stillness of the study, at other times amid the turmoil of a busy world, have suggestions for its theories been supplied. Nature, more than art, has aided him in his operations; and man more than books, has afforded the knowledge he desired. From the libraries of the learned he has nevertheless derived what treasures he could find; although far more from the observations of the learned themselves has he obtained the information he most needed. The crowded courts and the solitude of the country, the varieties of travel and the casualties of a professional career, have, by turns, yielded matter for meditation and speculation. The remarks of the vulgar, not less than the conversation and reflections of the highly cultivated, have here been turned to account; and even the habits of the brute creation have revealed to the author much that he could not otherwise have gained.³ From the ocean's depths has serviceable matter been occasionally gleaned; and the planets themselves have contributed to the stock. Not less the sweet and engaging flowers of poetry, than the hard rocks and gloomy caves of philosophy and forbidding metaphysical disquisition, have added to his store. These facts are however recorded, not to prove the pedantry of the writer, but simply to extenuate his seeming presumption:—to evince that his industry has been at least in some measure commensurate with the greatness of his task; and that

² Of this work a translation into French has recently been made.

³ Sir W. Lawrence asserts that the most important discoveries, those of greatest weight in physiology, were made in animals.—*Lectures on Comparative Anatomy*, Lect. iii.

his researches have been as extensive as his subject is comprehensive.

As regards the various works which have been consulted during the progress of this treatise, the author feels that he ought to state as exactly as he can, the extent to which he has made use of the thoughts and labours of others in this mode, and the manner in which he has turned them to account. To avow that he owes nothing to these able and learned writers, would be doing gross injustice to them. To assert that for everything of value which is here propounded, he is indebted to them, would be doing still grosser injustice to himself. To have attempted a mere epitome of their opinions, would have been to present a chaos of sentiments which must have appeared as contradictory in principle as they were perplexing, and even valueless, as a source of instruction. The writer has accordingly scrutinized elaborately their various theories, and has availed himself of them much in the same way as a judge turns to account the reasoning of the different advocates who address his court, and the several phases presented by the evidence: not adopting their opposite and inconsistent views and conclusions, nor being misled by their arguments; but from the sum total of the reasoning and facts adduced before him, combined with his own investigation and experience, endeavouring to arrive at such an opinion upon the whole of the circumstances submitted to his consideration, as the entire subject may appear to warrant; and pronouncing such a decision as will meet the merits of the case, and be in conformity with the principles and practice of the law which it is his duty to administer.

What appeared to the author to constitute the cream or essence of the thoughts of these distinguished writers, he has extracted, and presented to the reader, as notes in the margin of this work; from which he may both obtain instruction as regards the wisdom displayed, and also perceive the extent to which the author has availed himself of their ideas. On the one hand, it would have been presumptuous when treating on so important a subject, not to have inquired fully what the greatest minds, who have preceded him, thought on the same topic. On the other hand, it would have been dishonest to have taken advantage of their labours, by putting forth their sentiments and conclusions as his own.

As it is, he has fully investigated, and considered, and rigidly tested, their several contending systems and doctrines, adopting what appeared to him on examination to be correct, and not only rejecting, but endeavouring to refute, what seemed to him to be erroneous. In the notes containing extracts from these great writers, are contained the essence of the several leading theories on the different points embraced by this treatise, which have been enunciated by the most eminent philosophers from the earliest

times to the present day, supplying of themselves indeed a complete epitome of the system.* It may be proper, nevertheless, that the author should here state that the works referred to in the notes, comprise but a small portion of those which he has consulted, although they probably comprehend those which are the most important, and are the principal authorities on the subjects they embrace.

It is however not only to books treating expressly on topics connected with those embraced by the present work, that the author is indebted either for information or suggestion; but several others of a totally different class have been resorted to, and have been found extensively serviceable to him in affording a wide and accurate survey of man, and in exhibiting human nature under various phases. Biographical memoirs more especially, have been highly useful to him in this respect, as have also several poetical productions, especially in tragic composition; as well as works of fiction, which serve to exhibit human nature under various aspects, and excited by various emotions and passions. The records of foreign travel, as also visiting foreign countries themselves, and treatises on natural history, and still more so the study of that delightful pursuit in the observation of nature in different ways, have each been resorted to both to supply facts, and also to aid the attainment of right conclusions from them.

Nevertheless, although the books which the author has consulted

* In the opinion of *Lord Brougham*, "the arguments, generally speaking, on which both Plato and other philosophers grounded their positions, derive their chief interest from the importance of the subject, and from the exquisite language in which they are clothed. As reasonings they are of little force or value. It must, however, be admitted that the belief of the ancients was more firm and sound than their reasonings were cogent." He considers that none of the ancients has expressed himself more clearly or more beautifully upon the subject of a future state and the immortality of the soul, than has *Cicero*.—*Discourse of Natural Theology. Note on the ancient doctrine of the immortality of the soul.*

Alluding to the writers in this country of the seventeenth century, *Cole-ridge* remarks that "it would be difficult to conceive a notion or a fancy, in politics, ethics, theology, or even in physics or physiology, which has not been anticipated by the men of that age."—*The Friend*, sect. ii. Essay 1.

In reply to a communication which I made to *Professor Huxley*, soliciting his opinion as to the value of the writers on the science of man of the seventeenth century, particularly *Des Cartes*, to whose theories and principles frequent reference will be met with in the following pages, he says "you will find my opinion of *Des Cartes* stated in full, in the essay published in my 'Lay Sermons,' and in my address to the Belfast meeting of the British Association." In the publication referred to *Professor Huxley* remarks that "the first half of the seventeenth century is one of the great epochs of bibliographical science." Of *Des Cartes* he says that "he is not only among the chiefs of philosophy, but amongst the greatest and most original of mathematicians; whilst in my belief he is no less certainly entitled to the rank of a great and original physiologist." He further remarks:—"If you lay hold of any characteristic product of modern ways of thinking, either in the region of philosophy, or in that of science, you find the spirit of that thought, if not its form, to have been present in the mind of the great Frenchman."

at different periods on the direct subject of this treatise, would of themselves form a considerable library ; yet all that he has found in them of real service, might be comprised in one small volume. To these works he is moreover indebted rather for guidance than for instruction ; and they have been availed of more for affording suggestions, than for directly communicating information, or for leading to any certain conclusion in cases of difficulty. Books are indeed most valuable as beacons, standing on the shore of the vast, illimitable, and inexhaustible ocean of knowledge formed by nature, to warn us in what way to escape those rocks on which others have been wrecked ; and, above all, how to avoid being cast away while bringing our treasures to land.

Studying mankind in books, is somewhat like studying nature in museums and cabinets ; where although the most remarkable and the most characteristic specimens are collected together, and are duly arranged and classified, yet each is silent and motionless. Life, which is the grand endowment of all, is here wholly wanting.

In order to render the present work as complete as the author possessed the means of making it, and that every topic embraced might be sifted and ventilated with the utmost freedom ; recourse has been had during its progress through the press, to various persons of leading authority on these different subjects, for their opinion on those points which are especially within their respective spheres. For this purpose, several of the proof-sheets have been submitted to them, and many valuable notes have been supplied which will be found appended to the passages to which they severally relate. As will be seen from these notes, the matter has thus been made to occupy the attention of some of the acutest intellects, and the profoundest thinkers, of which the age can boast, who have declared their opinions with the utmost freedom, without any compromise whatever of their own individual views. In several cases, the sentiments expressed by the contributors of notes, not only do not coincide with, but even contradict, that of the author as set forth in this work. He has not, however, attempted to impose any restraint on their views. Their divergence in doctrine is the less to be wondered at, inasmuch as the notes have been solicited from, and supplied by, men of every shade of opinion, some of them known to differ widely not only from the author but from one another, and as it is mainly on doubtful and debateable points that their contributions have been applied for. The author has not on this account declined to insert them, inasmuch as it would have been unreasonable to ask for such aid, and then not to accept it. The present work is moreover necessarily far more suggestive than conclusive in its character ; aiming to serve rather as a pioneer in the progress of discovery, than as a pilot to bring us to any given point. The author takes this opportunity

of tendering his grateful acknowledgments to those distinguished men who, although intensely occupied with severe studies and arduous duties, have in the most liberal and kind manner rendered him their ready and able assistance in the way stated; and which has given a value to his work to which it could not otherwise possess any claim.

In many respects it would doubtless have been more satisfactory, and would have been more likely to result in the production of a perfect treatise, where a subject of so comprehensive a character was embraced, if the present undertaking had been carried out by several hands instead of by one, each of whom had devoted himself specially to a particular department in the science of man. A necessary defect in such a work must however have been its want of uniformity; in addition to which it would probably also have displayed a wide contrariety and contradiction on the most important topics treated on, without the attempt to enunciate any one leading general principle as the basis on which the book is founded; the result of which must have been to create confusion and uncertainty on a subject already too complicated and perplexing. What the great Napoleon said of warfare, is applicable to authorship also;—"One bad general is better than two good ones." It is essential that an enterprise of any importance, if it proceeds uniformly and regularly, be conducted by one mind alone, who is solely responsible for its superintendence, and for the theory or system which is sought to be developed.

The present work may indeed be considered to be of a triplex character. 1. As regards the original matter contained in it, developing the author's own opinions on the subject of man. 2. The notes containing extracts from different writers embodying their ideas, showing what have been the opinions of the various leading authorities, more particularly those of past ages, on this subject. 3. The notes containing the opinions of living writers on the leading controverted points relating to man, and which, at all events, express the sentiments of persons who are entitled to attentive consideration.

In the accomplishment of the present undertaking, from the study of books the author has gathered much. From the study of the world he has learnt still more. To the aid of the learned, who have so generously assisted him in the way stated, he is yet further indebted. From the study of mankind he has obtained a great deal. But most of all has he gained from the study of himself,—from looking inwardly. It is in his own soul, that the choicest treasures of the student of man are to be found. In the recesses of his own mind, lie his richest materials for mental labour. This is the mine, after all, which is at once the most profound, and the most precious; as it is also the one which is the most difficult to explore.

While during our observation of the nature and motion of the heavenly bodies, we are perplexed by the vast distance from us of the objects of our research; those objects in nature which are the nearest to us, we are the least able either accurately or comprehensively to survey. We cannot even behold the form of our own frames; and the most correct acquaintance with that shape which we obtain, is not from any direct view of them, but only from seeing their shadow. So is it as regards our souls, that we can neither acquire information respecting them by visual perception, nor by actual contact; and our fullest knowledge of them is gained by seeing them reflected, as it were, in the actions of those about us. Observation of human nature forms the only solid material from which to draw conclusions as to the constitution of man.

Many of the works on subjects connected with that which is now under consideration, seem too entirely speculative, and confined too much to the discussion of abstract notions, to be available as practical guides in the investigation and study of human nature. The plan of the writers of most of these treatises, has been to gather from others certain principles, and to deduce their theories and systems from the consideration of, and from acute logical reasoning upon, those principles; instead of deriving them from the study and actual observation of human nature. As most of the stars shine by reflected light, so a large proportion of philosophical authors appear as though they aimed rather to reflect the ideas of other men, than to originate any of their own.

Hence it is that the founder of, or the first writer upon, any branch of philosophy; or the inventor of, or first practitioner in, any of the arts or sciences; is the individual, who very frequently, far more than those who follow him, attains a full and deep acquaintance with that department of learning: simply because he is the only one who investigates thoroughly the actual nature of the study, and derives, from his own practical observation and experience, the knowledge and skill that he acquires. His disciples indeed rest content merely to copy from him; and thus derive their information, not pure and unadulterated from nature, but only through another, while they imbibe his prejudices or false views along with it.

In the pursuit on which we are now entering, the most close and attentive investigation is required, and that of the most difficult kind,—observation of the workings of our own internal intellectual being. In all sciences, men are prone rather to imitate others, and to follow in their track, than to think for themselves, and to venture on an unknown path. But this is especially the case, with regard to the subject before us.

Nevertheless, as the stupendous mechanism of the heavens, although so remote from our view, has been scanned and de-

terminated, its laws prescribed, and its foundations fixed, by the comprehensive genius of a Newton; so may we not hope that the science of mind, which is a topic no less sublime or vast, whose province lies apparently so much more within our ken, and which is a subject of such immediate importance to man, may sooner or later be placed upon a basis equally sure and satisfactory, its principles determined, its limits proclaimed, and its elements expounded.

It is probably mainly owing, on the one hand, to the absence of any definite or satisfactory theory as to the nature, qualities, attributes, and powers of the soul; and to the attempt to reduce it to a mere abstract nonentity, as a purely immaterial being, on the other;⁶ that materialism is taking so deep a root at the present day. Doubt having been thrown upon the very existence of a spiritual being, material agency has been almost necessarily resorted to, to supply its place.

The inductive process is that which has been adopted in the following work, as regards obtaining all the facts from the observation of nature; while an effort has been at the same time made to deduce from each fact, some principle, or theory, in the sublime science which is here sought to be advanced.⁶ To unite, and indeed to blend together, these two essential processes in one pursuit, should be the aim and object of every philosophical investigator. He should study from facts, but so as ever to deduce some new principle from them; and he should deduce some new principle, but should ever base his reasoning upon facts. From the neglect of this rule it is that so little progress has been

⁶ *Lord Brougham*, in common with some other philosophical writers whose opinions are quoted in the following pages, nevertheless insists on the absolute immateriality of the soul, in favour of which he adduces the usual arguments, but without defining in what he considers such immateriality to consist.—*Discourse of Natural Theology*, s. 5. The whole question is fully discussed, and the leading authorities on the subject are quoted, in the present work.*

In regard to Des Cartes' doctrine as to the essence of the soul, *Professor Huxley* remarks that Des Cartes lays it down that "matter is substance which has extension, but does not think; spirit is substance which thinks, but has no extension." On this point the acute and learned professor writes with characteristic sagacity and penetration:—"It is very hard to form a definite notion of what this phraseology means, when taken in connexion with the location of the soul in the pineal gland," where, as will be seen by some of the quotations from his writings in the following pages, Des Cartes supposed it to be placed. Professor Huxley also tells me that he does not consider the opinion of Lord Brougham on the matter in question to be entitled to weight.

⁶ It was well observed by an eminently practical man, the late *Mr. Abernethy*, that "hypothesis and theory are the natural and inevitable result of thinking; so that if we refuse to allow of any theory, we must prohibit all thought."—*Inquiry into Hunter's Theory of Life*, p. 9.

* *Vide post, Prel. Diss. s. v.*

made by many eager and active pioneers in different branches of science. While one has presented us with a mass of crude undigested matter, from which no original theory is deduced; another has offered us new theories, but which are unsupported by fact, or by nature. Indeed, some writers who regard facts alone as of real value, and rely on facts only, adduce different facts so contrary to each other, that one merely controverts instead of confirming what the other tends to establish;⁷ while the conclusions that they attempt to draw, are frequently at variance with the very facts on which they profess to be based. Facts and theory, like faith and works, should go together, and should support each other. Singly they are each worthless and barren. Combined they are valuable and fruitful. Facts from which no theories are deduced, and theories which are unsupported by facts, are alike and equally valueless.

Deductions from deductions, produce moreover a debased progeny; and facts joined to facts, bring forth but little of themselves. Deductions drawn from facts are, nevertheless, always valuable; and the most fertile operations are those in which facts are the material in the process of deduction. Deductions are to facts, what seed is to the ground. Neither are calculated to produce anything without the other. And while both are sterile by themselves; from their being brought together, exuberant vegetation at once springs. Originality too, unless fortified by facts, and confirmed by reason, is not of much avail, nor capacitated to produce any great results. It is valuable as a pioneer to aid discovery, but by itself is of but little utility. Truth, not novelty, should be the object, and the ultimate aim, of every philosophical inquirer; and it is only when tested by truth, that his originality can be admitted to be of sterling worth.

Moreover, in order to constitute a complete philosopher, he should be exercised not only alike in original speculation, and also in experience of practical life; but in both of them together. The one should enable him to devise the theories he propounds. The other should serve to establish them, and to prove them to be perfect.

If, therefore, it be objected that in the following work, on some important topics, the writer has indulged in mere speculation and conjecture, where reason only should have been resorted to, based upon fact;⁸ he would reply that where certainty on which to

⁷ "We have repudiated the practice of reducing science to an accumulation of desultory facts, asserting that science, as distinguished from learning, is essentially composed not of facts, but of laws."—*Auguste Comte. Positive Philosophy.*

⁸ "The greatest philosophers were, through the whole course of their inquiries and demonstrations, theorists."—*Abernethy's Inquiry into Hunter's Theory of Life*, p. 10.

"A certain number of speculative minds is necessary to a cultivated state of society as a condition to its progressiveness; and nature herself has pro-

reason is unattainable, and facts are not to be met with, surmise may in such a case fairly be ventured upon. In the progress of philosophical knowledge, hypothesis has, moreover, often proved to be the parent of discovery.⁹

Theorizing may be only pioneering; but without it no researches beyond the beaten track can ever be effected. He who keeps entirely to the accustomed road, or who never ventures on any route except where others have been before him, can hardly hope to effect new discoveries in the territory through which he is passing; although he may escape the dissatisfaction of finding that the course he projected is impracticable, and that he must select a new line on which to proceed, and on which he may perhaps to some extent, have to recede. On the other hand, he who never advances beyond theory, and whose theories fail to be reduced to axioms, is like a person who often starts on a journey, but who never arrives at any given point.

Propounding an hypothesis is always lawful and to be encouraged, when it may conduce to knowledge. Even in cases where it is the occasion of error, it is justifiable; provided that, in such instances, truth might have been reasonably expected to be the result. Speculation, indeed, constitutes the scaffolding which, although no part of the real building, is what causes the edifice to be raised. Hypothesis and conjecture are also in the science of mind, what experiment is in the science of matter. They lead to truth, though they are not entitled to be regarded as truth. In the former case they are invaluable. But if adopted as substitutes for truth, they are worse than valueless, leading only to error.

In many important branches of philosophical investigation, moreover, some of them admitting of much more certainty than that before us, hypothesis and conjecture are all that we have been able to attain. And, indeed, it not unfrequently happens that the more desirable is the attainment of certainty, the more difficult it is to arrive at it.

Although nothing is so easy as by sarcasm to cast ridicule or obloquy upon a theory which we have not the skill to controvert,—just as any child may dash to pieces a watch, which a scientific mechanic only can construct;—yet, after all, if we fairly consider the matter, great as may be our contempt for theories gene-

vided against any too great increase in this class of her productions.”—*Cole-ridge. The Friend.*

⁹ *Locke* remarks with respect to hypotheses, that they are great helps to memory, and often direct us to new discoveries.—*Essay on the Understanding*, b. iv. c. xii. s. 13.

Mr. Isaac Taylor observes that “science, while professing to care for nothing but what is certain, has actually owed the extension of her domain very much to chance, and not less to conjecture.”—*Physical Theory of Another Life*, chap. xx.

rally, we must acknowledge how few even among firmly held opinions, are, in reality, anything more than mere theories.

Some of the theories propounded in the following pages, will, no doubt be denounced as erroneous, and, it may be, extravagant.¹ And the author is conscious that he might have escaped a share of that censure with which all new doctrines, whether right or wrong, are invariably assailed, by abandoning such of them as are obviously most open to attack. It appeared to him, however, as he feels convinced of their truth, to be at once more ingenuous, more consistent, and more conducive to the interests of philosophy, to leave such passages open to the strictures of those who may be disposed to discuss these perplexing topics; so that if erroneous, his views may be controverted, or if correct they may be confirmed. He desires not only to teach others, but to profit by their experience. Although he always aims to avoid error, he will never be ashamed of, nor sacrifice truth. Dispassionate criticism he not only does not deprecate, but he is anxious to invite. He trusts, however, that the criticism which he obtains will be fair and candid; and that it will ever aim not so much to controvert what he has said, as to aid in attaining actual truth, which is the only legitimate object alike of the critic and of the author. Some critics, indeed, are like watch-dogs, and make a point of attacking indiscriminately all those who are strangers to them. Or, like wasps, they are wont to sting every animal that is not of their own species. The writer may also fairly ask that a work to which he has consecrated so many years, and the subject of which he has pursued with such painful research, may not be hastily judged of by an hour's perusal; or its merits at once decided by any mere superficial surveyor of this very abstruse science. It is, of course, far easier to abuse an author than to answer his argument. Nor is it difficult to deteriorate in a day, an undertaking to which a life has been devoted.

The author is further aware that, while many of the theories and propositions which he has advanced, may be stigmatised as at variance with reason and truth; others that are in no respect more correct, or better founded, will be cavilled at as mere truisms. "What is a truism?" is, perhaps, however, as perplexing a question as "What is truth?" Three grand receptacles, or shells, if we may so term them, of truth, are, 1. Paradoxes; 2. Truisms; 3. Aphorisms. 1. A paradox is an assertion of a truth which is not only not obvious when it is pronounced, but frequently appears at variance with fact, although it becomes developed on

¹ "False facts are highly injurious to the progress of science, for they often long endure; but false views, if supported by some evidence, do little harm, as every one takes a salutary pleasure in proving their falseness; and when this is done, one path towards error is closed, and the road to truth is often at the same time opened."—*Darwin's Descent of Man, &c.*, vol. ii. p. 385.

close examination. 2. A truism is an assertion of a truth which is obvious when it is pronounced, but which was undiscovered or unperceived before its enunciation. 3. An aphorism is a truth which becomes perceptible on investigation, although not before; and which was not known until it was enunciated. A truism as distinguished from an aphorism, may be taken to be this. A truism stands exposed, lifting its head high above the surface of the sea of knowledge, so that every person who approaches it is at once aware of its presence. An aphorism is a great truth, not less obvious when once seen; but which lies beneath the surface of knowledge, over which its vast waters roll, and which, until they are drawn off, continues buried in its profound depths. When however, it is once exposed to the light, its existence is as palpable as is that of a truism. But while the one is open to the gaze of every observer, the other is visible only to the ken of the most experienced, or the most penetrating. Truisms are what the every-day saunterers on the shore of the sea of knowledge constantly meet with. Aphorisms, and more especially paradoxes, are what the great intellects of the world only, who have dived down into the mighty depths of that vast ocean, have brought to light, and by doing which they have mainly earned the reputation they possess.

Perhaps the nearer an aphorism is to a truism, the more perfect it is, provided that it does not absolutely merge into the latter; just as fruit is the most ripe when it is ready to fall to the ground, although it is spoilt if it actually loses its hold.

One thing may moreover be remarked in relation to many asserted truisms, that, although they may be said to be so obviously certain as regards the correctness of their principles, as not to need enforcing; they are, nevertheless, as constantly and as surely neglected with respect to their practical observance. Everybody assents to them, but nobody applies them.

It is consequently, no fault in a writer that he advances truisms, if these truisms serve as the foundation on which to build sound practical principles, and if the truth has not already been acknowledged and acted upon. All the grand principles which regulate society, are truisms. The greater part of the precepts enforced in that pure fountain of truth, the Bible, are also truisms. The real difficulty is to enunciate the truism, and to establish it, by which alone it becomes a truism, and when alone its truth is acknowledged. The truism was still in existence, and the truth which it enveloped; but they both lay buried in neglect. Like gold in the earth's recesses, it is gold while there as much as when it adorns a diadem, or circulates as a sovereign; but it never glitters, or acquires any value, until it is brought to the surface, and separated from the dross. In many cases, indeed, the more obvious the truism, the more precious is the truth which it embodies. And the more palpable is

the truth when enunciated, the less likely it is to be acknowledged.

A truism is, in fact, but an aphorism proved true; the bloom, of what the former is but the bud. The highest perfection, however, of philosophical disquisition consists, not in proclaiming truisms, much less in appearing to do so; but in making all aphorisms appear as truisms, and in converting apparent paradoxes into well-established propositions.

As the world has advanced in its progress, more especially of late years, art and metaphysics appear to be less and less cultivated; while practical science, and a knowledge of matter, are more and more attended to. In a corresponding manner in the philosophy of man, while the sedulous, and, no doubt, too exclusive study of metaphysics has, not altogether undeservedly, fallen much into neglect; that of physiology, as a branch of the same pursuit, has proportionably advanced, and been received into favour. As regards both these pursuits, each valuable in their way, the error has been that, at different periods, one only of them has been fully studied, to the neglect of the other; whereas, like theory or speculation, and the observance of facts, each should be followed together, and rendered corrective one of the other, by which alone both are rendered of real value, and are made to fructify and produce important results. In the present age, the extensive and too exclusive attention paid to matter, has largely influenced even the study of mind itself; and spirit is forgotten in the care bestowed upon body.² Among the earlier students of mental philosophy, too little care was bestowed on the nature of our material structure; and their reasonings were too much directed to the consideration of mind alone. If they went to one extreme, we have, in the same proportion, gone into the other. Probably, indeed, the system of our great philosopher, Lord Bacon, may have had its influence here, more especially as directed against that of Aristotle, who considered mind too abstractedly, without relation to matter. In former times speculation was almost exclusively indulged in, to the neglect of facts. In our day, undue attention is given to facts, to the neglect of speculation.

The grand error, however, as it appears, has been, not so much in considering spirit, and in indulging in speculation too extensively; or in devoting our attention to facts, and also to matter, too extensively: but in considering them separately, alike as regards spirit and matter, and facts and speculation, without regarding their mutual and essential connexion, and reciprocal influence. The leading principle on which the present treatise has

² "Indications now exist that a metaphysical period is at hand, which may be as great in the future for metaphysics and moral philosophy, as the past has been for physics."—*The Mind of Man*. By A. Smee, F.R.S. Preface, p. x.

consequently proceeded, is the desirableness of the union of these two modes of operation, instead of following either of them apart. The aim throughout has been not to neglect speculation, or to overlook facts; but, in each case, to ground speculation upon facts, and from each fact to suggest something in the way of speculation; as also, if possible, from speculation itself, which must be ever uncertain and unsatisfactory, to draw conclusions which may be certain and satisfactory. And this the writer holds to be the only safe, and correct, and true principle upon which philosophical investigation ought to proceed, and through proceeding on which it may be expected to bear fruit.

On those particular topics of various kinds which touch directly on the province of physical and material investigation, and of the medical professor, the author does not of course presume to enter; but what he may occasionally advance connected with those subjects, he would have considered as proceeding rather in the way of suggestion than of assertion, and as though he was endeavouring to point out through his own experience, those paths to knowledge which have been opened to us, and to aid by the application of mental investigation, the progress of material science. The two should, indeed, ever assist, and correct, and direct one another; and in many instances the one will be found the best and surest, and indeed the only true interpreter and expositor of the other. But it is mental science only, that he can hope, or indeed desire, to be considered as discussing, with any confidence. The other he merely resorts to for illustration; and he is glad here of being set right by those who have made this department their peculiar study, and can speak upon it with an authority to which he of course can assert no pretension.

The anatomy of our material, and the anatomy of our mental system, are, in many respects, calculated to illustrate one another; and it may be that to some the dissection and analyzation of our spiritual being, is as perplexing and painful, and contributes to teach as humiliating a lesson, as does that of our material structure.³ In the case of each, what is fair on the outside, is oftentimes discovered to be but foul within; although the constitution of both is alike wonderful and admirable. If moreover, physiologists learn much from the study of animal forms and actions, and considerable light is thrown on the nature of human material organization by the examination of that of the brute creation, and by a comparison one with another; surely no less in the study of the mind of man, and in the examination of its varied phenomena and operations, is light thrown on the

³ *Dr. Priestley* alludes to the necessity of "the conjunction of physiology with metaphysics;" and asserts his persuasion that "no theory of the mind can be satisfactory, which is not founded on the history of the body."—*Memoirs of Dr. Priestley*. Appendix No. II., *Metaphysics*, pp. 295—334.

subject by a comparison and examination of the economy of animal instinctive being; and of the various efforts which it makes, and the phenomena that it displays. Creatures of a species the most remote from ours, will indeed occasionally afford illustration of the nature of man, of a quality the most striking and the most valuable. Even vegetable anatomy may be of great service here.⁴

In nearly all, if not in every one of the treatises which have been put forth on the subject of man, or of the mind,—not even excepting Locke's immortal "Essay concerning Human Understanding," which probably carries our knowledge of the topics on which he treats beyond the limits attained by any of them,—their aim appears to be not so much to consider what man is, as what he does. They endeavour, not so much to inquire into his essential being, as into the quality of the actions which he effects. They do not seek so much to ascertain his real nature, as to define the operations of which he is capable. In the present undertaking, the author has been so bold, it may be thought by some, perhaps, so presumptuous, as to endeavour to carry his researches, and to effect discoveries, further than what has been achieved by those who have preceded him; and by tracking the upward course of the stream, he has sought to trace out its original source.

It may be also objected by certain persons who read this treatise, that the writer has attempted too much in considering man altogether in a single work, being a subject at once so complex and so comprehensive; and that he has endeavoured to investigate this subject further than it is possible for human knowledge to penetrate. It may be moreover contended, that he has founded his principles, in many instances, upon a basis which is unable to support them, and which cannot in some cases be even reasonably supposed to be secure.

With regard to the former of these observations, he would remark that the plan of study which he has followed, necessarily led him to take a general view of human nature in all its different branches, rather than to limit his investigations to any one particular department in that pursuit. Indeed, when he first began to collect together his ideas on the subject of the present treatise, he intended to confine his researches, and his observations, to the intellectual endowments only, and not to attempt to wander further in this study; considering that a complete survey of human nature would be too extensive to be accomplished. It however ere long became obvious to him, that the passions, and feelings, and other impulses of the mind, were so intimately connected with, and so dependent on, the intellectual faculties,

⁴ According to *Professor De Quatrefages*, we ought to study the history of cultivated vegetables, as well as of domestic animals, to throw light on our own history.—*Report on the Progress of Anthropology*, p. 144.

that it would be impossible to treat comprehensively or adequately on any single branch of human nature, without studying, and examining minutely, its corresponding departments. And it is now his conviction, to which he has been led by experience, that the knowledge of one branch of it is the best expositor of, and the surest guide in following, that of another; and that a connexion and analogy exists between them, highly important to be observed, for a true acquaintance with which every department of this study must be brought under consideration.⁵

One great obstacle to the pursuit of the present subject, has been the very abstruse nature of it, and the want of some visual medium for illustrating it. This serves in other branches of knowledge in an important manner, both to impress the ideas on the memory, and also to simplify them. Attempts to supply this deficiency have indeed been made, and maps of the mind have been invented; but from their being so ill-suited to any study of this nature, they have served rather to mislead than to assist. The author has therefore endeavoured to atone for this want in a more natural way, by instituting on several occasions an analogy between the mind and the body, and their respective faculties and organs; making the latter serve as a kind of diagram, or chart, for the illustration of the former.

As regards an effort being here made to penetrate beyond the bounds prescribed to human knowledge, and the writer having built some of his hypotheses on a basis of whose firmness or security he had no good assurance,—as perhaps might more particularly be contended with regard to particular observations in the Preliminary Dissertation: he must here remark, in addition to what he has already said upon this subject, that, although in the science of man, as in many other important sciences, absolute certainty is not to be attained; yet, nevertheless, speculation, and analogical reasoning from the principles which we find exhibited in nature, may not only be most profitably employed, but as much moral certainty, or assurance, as can be gained in this world with regard to matters of this description, may be thereby obtained.⁶ It should be here also borne in mind that, in the pursuit of many sciences which were ages in reaching maturity, but which were ultimately brought to a high degree of perfection; the original hypotheses upon which the first investigators of those sciences founded their theories, and which led the way eventually to the noblest discoveries, and the unravelment of the most important truths, were not always built upon a basis altogether

⁵ *Pliny* long ago remarked that nobody can perceive and estimate aright, the power and majesty of nature throughout her operations, if he only surveys a part of the system, and fails to embrace it as a whole.—*Hist. Nat.* lib. vii. c. vii.

⁶ *Vide* book iii c. iii. s. 6.

firm, or even maintainable, but which, nevertheless, served as a temporary support in the erection of the edifice, until one more stable and secure could be supplied.⁷ Thus, although the motion of the heavenly bodies, or the form of our earth, were not in the early days of astronomy, known to philosophers; or the true theory of the circulation of the blood, or of the action of particular poisons ascertained by medical practitioners until a late period of advancement in the science of medicine: yet while they proceeded on some hypotheses since proved to be wrong, this circumstance did not prevent the improvement and development of those sciences; but the theories so established, however in themselves deficient or incorrect, were of essential service in the prosecution and advancement of the study.

Many of the theories which are here advanced, may or may not be more or less, or entirely, original. At any rate, the author had not previously met with them in the works of any writer; although it is very possible that, as often happens, others in following the same train of ideas as himself, may have arrived at the same conclusions. In some instances, indeed, he has found this to be the case. So far, however, from being mortified by the circumstance, he has been ready to regard it as a confirmation of the correctness of his own views. If several lay claim to the same original idea, we must decide the title of the real owner by ascertaining who brings the best arguments to support it; as the merit of a general in choosing a good position, is evinced by his skill in availing himself of it, and his success in defending it. The claim to originality of mind is, however, rather the object and the province of a poet, than of a philosopher; with whom the correctness of his reasoning, not the novelty of his hypothesis, is regarded as the chief merit. Not to discover theories, but to ascertain among contending principles which is the correct one, should be his grand aim. It is indeed in many cases, somewhat difficult precisely to determine where originality may be said to begin, and where it ends. It is clear that one who hits upon a new idea, is not the less original because others unknown to him may have before conceived it; as the skill of a navigator in discovering a country of the existence of which he was ignorant, is not the less because others unknown to him may already have touched its shores. Where two persons chance to originate the same theory, it is however hardly likely that they will both treat it in the same manner; and indeed, we sometimes see the most hackneyed subjects handled by men of genius with much originality, and placed in an entirely new light.

Nevertheless, if different persons travel over the same country,

⁷ "Hypothesis," observes *Mr. Isaac Taylor*, "is a preparation for reasoning."—*Physical Theory of Another Life*, s. 15.

and resort to the same roads, it is surely no great matter of wonderment that they should hit upon the same objects, and view the same prospects; although they may chance to be very differently moved by the same sights, which is in reality that which marks the essential difference between them as regards their researches. So in the pursuit of the same studies, in the same manner, and with precisely the same object, by different persons, it is by no means extraordinary that the same ideas should be excited in their minds, and that the same theories should be originated; although they may differ widely as to the conclusions they arrive at, which again serves to test the difference in their intellectual constitution.

As regards the ideas contained in the present work, it may be said indeed that many of the observations here made, are entitled to be called original, only because they were not thought of, nor hit upon, before. But is not the first discovery of a truth, the intrinsic merit in original writing? Would it be gravely objected to a scientific explorer, who, by virtue of his sagacity had discovered a mine of gold, that the metal was quite as much in existence before, as since the time when he found it out? So it is also of golden truths, which lie deep in the bosom of the great world of knowledge, and the property in which belongs to the original finder.

On first commencing the present undertaking, and considering the many acute and ingenious minds which have been engaged on the subject, it seemed to be utterly hopeless to attempt to produce anything whatever original. Indeed, one might almost as well expect to discover new islands in the British Channel, as to find out anything fresh in a branch of knowledge which has been so frequently, and so fully explored. This too is a track which has been traversed, not only by many, but by all; inasmuch as the workings of human nature, and the operations of the mind, are what each must alike have observed, and even felt; and constitute indeed, the most common and constant subject presented before us. It is, therefore, from what is perhaps, by some deemed to be the most exhausted of all topics, that the writer is expected to draw forth new matter, and to bring to light original discoveries.

Both in the material and in the mental world, a great many important discoveries which were ages in being brought to light, when effected appear very ordinary; and our chief wonder about them is, how it could happen that they were never found out before. Several very useful mechanical inventions seem, when we become acquainted with their principles, to be almost trivial, from their extreme simplicity. Yet surely, they are not on this account by any means the less valuable; nor ought we to think less highly of the genius of the inventors. But so is it also in the metaphysical world. There are many, most impor-

tant operations of the mind which, while they are at all times, and to all persons alike, open to observation, lie long unobserved, although their discovery is of much consequence. When they are perceived, they appear so plain, and so obvious, that the great wonder is they were not before noted; and thus the originator of a grand and leading principle is denied, or, at least, but tardily and grudgingly allowed, his just claim to applause for the ingenuity and penetration which he has displayed, and the essential services which he has performed.

Moreover, the greater is the experience of any one in philosophical investigation and speculation, and the larger the share of penetration, and of originality, which he himself possesses; the less will he be inclined to deny originality to others, or to set down every casual coincidence between those who pursue the same track, as a case of unfairly copying or stealing ideas one from the other. Nevertheless, it cannot at the same time be too strongly impressed, that as larceny of other men's goods proves alike the perfidy and the poverty of the thief; so pilfering other men's thoughts, and appropriating them as his own, proves alike the intellectual barrenness, and the moral baseness of the pirate. On the whole, however, whether in reasoning from facts, or in hypothetical speculation, it should ever be borne in mind as a fundamental principle, that the real value of any idea, or new theory, depends, not on its originality, but its truth. Indeed, its truth is, after all, the only actual test of its genuineness.

From the virulence with which every attempt at new discovery has uniformly been assailed, it might reasonably be inferred that the real object, and proper province of philosophy, are not to promote, but to retard in every possible way, the progress of knowledge. Originality is the treason of philosophy. The public are, moreover, ordinarily prone to treat a new idea very much as they do a new animal. Everybody regards it with a look of suspicion, not unmingled with horror. It is forthwith voted venomous by acclamation; and each one is forward at once to aid in the agreeable and laudable occupation of worrying and exterminating it altogether. Originality, until its claim is admitted, bears the nickname of extravagance. And extravagance when it pretends to soundness, very often dignifies itself with the title of originality. That however which the generality of people ask whenever a new idea is started, is, not whether it is true, but whether it is orthodox; and this they decide by the unerring test of whether it agrees or interferes with their own deep-rooted, and often erroneous, prejudices. There is nothing, in fact, which mankind so universally, so thoroughly, and so genuinely detest, as they do originality; unless, indeed, it be truth itself.*

* "Truth scarce ever yet carried it by vote anywhere at its first appearance."
—*Locke on the Understanding*. Preface.

He who is the discoverer of the one, must inevitably expect persecution; but unflinchingly to uphold the other, ensures certain martyrdom. Where the two are espoused together, there can be no hope for the unhappy advocate of such heinous doctrines, who will doubtless be denounced as a very demon. To establish truth, is even more difficult, and, in many respects, more dangerous, than to attack error. Few that have had the hardihood to attempt the latter exploit, have nevertheless come scatheless out of the contest. Invading the region of error, is somewhat like disturbing a nest of hornets. The attack is certain to be fiercely repulsed; and venomous stings are the only reward which the assailant must expect. No fortress is so zealously or so valorously defended as is that of error.

Not only, indeed, is there nothing which mankind hate with so cordial, so unadulterated a degree of detestation as they do truth; but the more important and the more sterling is the truth that is submitted to them, the more vehement is their indignation against the teller. Towards those who deceive them, no animosity is evinced. Indeed, they will cordially love those who misguide them, and even adore those who with falsehood and flattery lead them astray. All their malice is stored up for those who strive to rescue them from delusion, and to prevent them from falling into the snares to which they were doomed. The one unpardonable sin is telling the truth; and the greater the truth, the greater the atrocity committed. Teachers of real truth are, therefore, ever the objects of detestation; in pretty exact proportion too, to the value of the truth told. Hence, philosophers are persecuted, and prophets are put to death. Such is the natural, legitimate, and almost certain fate of every real inquirer after knowledge, and every fearless friend to the intellectual advancement of mankind.

God created but one forbidden tree of knowledge. Man, on the other hand, would have them to grow in forests. Indeed, many would not be satisfied until they had caused the vastness of our prohibited information; to bear proportion to the immensity of our profound ignorance.

It has been the practice of writers on mental philosophy, to make a threefold division of man into his animal nature, his moral nature, and his intellectual nature. Without discussing here the correctness or propriety of such a distribution, the author may be allowed to state that it appeared to him not only more suitable to the plan which he has pursued in the treatment of the present subject, but also more strictly philosophical, to adopt the classification which is here effected, dividing the consideration of man into his *Medial Constitution*, his *Moral Constitution*, and his *Mental Constitution*. It further seemed to him, for the reasons which he has more fully set forth in the proper place,⁹

⁹ *Vide post*, book i. chap. i. s. 1: vol. i. p. 217.

that the term "animal" nature or constitution, would not correctly imply or include the various characteristics and endowments which he desires to comprehend under the first division; some of them not being possessed by animals at all, and others being common to vegetables as well as to animals; while the whole are of an intermediate or "medial" class, belonging, and being in part, more or less allied alike to the intelligent, the animal, and the vegetable world. The term "moral" does, however, appear most fitly to denominate the qualities and endowments embraced in the second part or book of this work. In the third book, the term "mental" constitution, seems to be appropriate to denote faculties and powers which belong exclusively to the mind, as contradistinguished from all other intelligence, of which instinct may be deemed to form a branch. The constitution embraced by the first book, relates to man as a terrestrial and social being. That comprehended in the second book, relates to him as a responsible and dependent, and consequently moral being. And that in the third, relates to him as a being who is intelligent, intellectual, and immortal.

In entering upon the consideration of the nature and constitution of man, in the *Preliminary Dissertation* the *origination and production of animated beings* generally, and in various modes,¹⁰ as also the development of sex in such beings,¹ have been inquired into, together with the transmission of qualities and endowments of various kinds, from parents to their progeny.² An investigation is then instituted into the *general constitution of animated beings*,³ more particularly man as composed of a material frame,⁴ varying as to certain of its qualities, and certain of its properties and endowments, spiritual as well as material;⁵ after which the different *principles of vitality* of various kinds are discussed,⁶ examining the characteristics and qualities of those of each order,⁷ and of the existences or essences allied to, or springing out of them;⁸ which leads on to the inquiry as to the provinces respectively assigned to matter and spirit.⁹ The *various relations of spiritual existences*¹ are investigated; and in the section following, the *nature and qualities of the soul*,² which, although immortal in its nature, but in certain cases annihilable, does not appear to be necessarily essentially immaterial.³ Both its present and its future condition are here considered.⁴ The *various operations of spiritual beings* of different orders, and the modes in which these

¹⁰ s. i. as. 1, 2, 3.

¹ s. i. a. 4.

² s. i. a. 5.

³ s. ii.

⁴ s. ii. as. 1, 2, 3.

⁵ s. ii. as. 4, 5.

⁶ s. iii.

⁷ s. iii. as. 2, 3, 4.

⁸ s. iii. as. 3, 4.

⁹ s. iii. a. 5.

¹ s. iv.

² s. v.

³ s. v. as. 2, 3, 4.

⁴ s. v. a. 5.

are conducted, are subsequently discussed;⁵ after which an examination is instituted into the nature of the *union between the soul and the body*, and the particular influences resulting from that union.⁶ *The disturbances*, of various kinds, *which occur to interfere with or interrupt such union*, are next considered;⁷ and subsequently, the *entire dissolution of this union*,⁸ resulting in the destruction of the material frame;⁹ but which although destructible, is not therefore necessarily annihilable.¹ This part of the work concludes with an investigation of *the distinction, as regards intelligence, between intellect and instinct*,² considering the latter as mainly resulting from perfection both in the constitution and operation of the sensitive system.³ An inquiry is here instituted as to the existence of an independent, instinctive, spiritual being in animal nature; and which must be supposed to be imperishable,⁴ although not, necessarily, endowed with any active capacities,⁵ or moral qualities.⁶

In the first book of this treatise, a survey is taken of the various powers annexed to man's material frame, among which the *Senses*⁷ deserve peculiar notice, being the inlets to the soul of all sensations, from which spring ideas of external objects;⁸ and admitting of distinct classification, according to their nature.⁹

To each action it is here considered that we are stimulated by one of the *Emotions*,¹ which are excitements either of the body or of the soul,² and are of different kinds, either impelling, repelling, or simply moving us,³ and originating in various modes.⁴

⁵ s. vi.⁶ s. vii.⁷ s. viii.⁸ s. ix.⁹ s. ix. as. 2, 3, 4.¹ s. ix. a. 5.² s. x.

³ But few persons probably will be disposed absolutely to accept Sir Isaac Newton's theory, that "the instinct of brutes and insects can be the effect of nothing else than the wisdom and skill of a powerful, ever-living Agent, who, being in all places, is more able by His will to move the bodies within His boundless, uniform sensorium, and thereby to form and reform the parts of the universe, than we are by our will to move the parts of our bodies."—*Principia. Scholium Generale. Opt.* Doubtless in one sense every movement in nature originates in, and is directed by the Creator. But this is very different from the special intervention here supposed, by which what we understand by the term "instinct," would be in reality not so much constituted as superseded. Attraction and gravitation might also be accounted for, or rather supposed to be superseded, upon the same hypothesis.

Professor Hurley informs me that in his opinion the lower animals possess that part of the brain which we have every reason to believe is the organ of consciousness in man.

⁴ s. x. a. 4.⁵ b. iii. c. i. s. 3, vol. ii. p. 183.⁶ s. x. as. 1, 2, 5.⁷ b. i. c. i. s. 1.⁸ c. i. ss. 1, 7.⁹ c. i. s. 7.¹ c. ii. ss. 1, 6.² c. ii. ss. 1, 2.³ c. ii. ss. 4, 6.⁴ c. ii. s. 1.

As regards however those actions that relate to external objects, and which are essential for our well-being, *the Appetites*,⁵ consisting in complex excitements originating in the material frame, but communicated to the soul,⁶ serve to impel us.⁷

But with respect to certain other actions in relation to intelligent objects only, which are desirable for us to pursue, we are stimulated to them by *the Passions*;⁸ which are strong complex excitements originating in the soul,⁹ although operating upon and through, the body.¹

We are drawn towards certain objects which are closely connected with us, whether intelligent, or unintelligent,² by complex excitements termed *Affection and Animal Attachment*,³ according to the nature of those objects.⁴

In the second book of this treatise, is considered the nature of *Moral Disposition and Character*,⁶ which is here shown to originate, not in any independent endowment of man with moral faculties or powers, but to be produced by the application of the reason to moral subjects, and to be the result of contending medial and mental influences.⁶ The essence of moral endowment,⁷ of the will,⁸ of virtue and vice,⁹ and our natural inclinations to either,¹ as also moral, qualities in general,² are here discussed.

The soul is impelled towards particular objects, both immediate and ultimate, by certain excitements arising in itself, which are here termed *Moral Desires*.³

The *Conscience*⁴ is shown to be a complex endowment, constituted of the reason and certain medial excitements,⁵ which possesses the supreme control in the moral regulation of man.⁶ An inquiry is also instituted into its essence,⁷ and various offices⁸ and operations.⁹

The third book of this treatise is devoted to the consideration of the *Intellectual Faculties*,¹ their nature, and functions. The soul, which is moved to action both voluntarily and involuntarily,² possesses three peculiar distinct and independent faculties, that constitute its power of voluntary action of various kinds, whereby it is able to receive ideas, to compare ideas, and to

⁵ c. iii.

⁶ c. iii. ss. 1, 4.

⁷ c. iii. s. 6.

⁸ c. iv.

⁹ c. iv. s. 1.

¹ c. iv. ss. 5, 9.

² c. v. ss. 1, 3, 6.

³ c. v. ss. 6, 7.

⁴ c. i. ss. 6, 7.

⁵ b. ii. c. i.

⁶ b. ii. c. i. s. 1.

⁷ c. i. s. 1.

⁸ c. i. ss. 2, 3.

⁹ c. i. s. 4.

¹ c. i. s. 5.

² c. i. ss. 6, 7, 8, 9.

³ c. ii.

⁴ c. iii.

⁵ c. iii. ss. 2, 3.

⁶ c. iii. s. 2.

⁷ c. iii. s. 7.

⁸ c. iii. s. 8.

⁹ c. iii. ss. 9, 10.

¹ b. iii. c. i.

² c. i. s. 2.

compound ideas;³ while to each of these three leading powers, are three subordinate powers or capacities annexed.⁴ According to its proportionate endowment with these several faculties and capacities, is the quality and character of each mind.⁵

The *Understanding* is the faculty of the mind through which it is qualified for receiving ideas.⁶ By its capacity of *Apprehension*, this faculty receives ordinary ideas readily and clearly.⁷ By its capacity of *Deprehension*, it receives ideas with exactness and particularity.⁸ By its capacity of *Comprehension*, it obtains an enlarged and extensive view of a subject.⁹

The *Reason* is the faculty of the mind through which it is qualified for comparing ideas.¹ By its capacity of *Sense*, it compares ideas with readiness and facility.² By its capacity of *Analysis*, it compares them with strict logical accuracy and precision.³ And by its capacity of *Judgment*, it compares comprehensively and adequately the leading ideas relating to subjects of an enlarged and comprehensive nature.⁴

Genius is the faculty of the mind through which it is qualified for compounding ideas.⁵ By its capacity of *Wit*, it combines together ideas of opposite kinds, which contrast strongly and vividly one with another.⁶ By its capacity of *Taste*, it combines together ideas which are similar, and harmonize well together.⁷ And by its capacity of *Origination*, different ideas are so combined together, that a new and original subject or compound is thereby produced.⁸

The *Memory* is here shown to be a complex endowment of the mind,⁹ serving through its passive power, termed *Retention*,¹ as a repository of ideas; which are recalled by the operation upon it either of its active power termed *Recollection*,² or of the understanding.³

An inquiry is also instituted into the *Concurrent Operation and reciprocal Influence of the various endowments and powers on each other*; ⁴ and it is attempted to be shown how, in different modes, the character is biassed, and the course of conduct is directed by them; ⁵ and thus, through the balance created by these several contending influences, the harmonious operation of the whole system is promoted and ensured.⁶

In the last place, an endeavour is made to demonstrate how

³ c. i. s. 4.

⁴ c. i. s. 4.

⁵ c. i. ss. 5, 6, 8.

⁶ c. ii. ss. 1, 6.

⁷ c. ii. s. 2.

⁸ c. ii. s. 3.

⁹ c. ii. s. 4.

¹ c. iii. ss. 1, 8.

² c. iii. s. 2.

³ c. iii. s. 3.

⁴ c. iii. ss. 4, 6.

⁵ c. iv. s. 1.

⁶ c. iv. s. 2.

⁷ c. iv. s. 3.

⁸ c. vi. s. 4.

⁹ c. v. s. 1.

¹ c. v. s. 2.

² c. v. s. 3.

³ c. v. s. 1.

⁴ c. vi.

⁵ c. vi. s. 3.

⁶ c. vi. ss. 3, 4, 7.

capable of, and how dependent upon education, both natural and acquired, including alike *Discipline and Cultivation*, are, not merely the mind as a whole, but every separate faculty and capacity, each of which should receive its due and appropriate share of training.⁷ The different modes of effecting this object,⁸ and by what means the various diseases incident to mind as well as to body,⁹ may be averted or resisted, are also here discussed.

In the general selection of terms by which to designate the several endowments, qualities, and powers, described in the following pages, those have been purposely chosen that are familiar and in common use, in preference to coining new ones. Although these latter might possibly, and indeed probably, be more strictly and philosophically appropriate, and might confer an air of greater originality on the theory here sought to be advanced; yet they appeared on the whole to be less calculated to serve as guides towards the attainment of truth, to the unsophisticated and candid inquirer, than the former could do. Wherever practicable, the old and accustomed terms are therefore resorted to, in order to denote these various properties; however, in certain instances, it may be necessary to some extent to qualify their ordinary signification so as to render this strictly appropriate, and in accordance with the definitions which have been given of them; and by which, mainly, rather than by their names, their nature and functions are to be judged of. The perfection of philosophical denomination or definitive designation, is to be at once precise in its terms, and plain in its signification; in order that every person of common intelligence may use it rightly, and may also understand it as he uses it.

Technical terms, though occasionally found serviceable as guides in scientific investigation, many times prove serious obstacles in the researches of men who are ardent in the pursuit of truth; and it cannot be denied that very frequently, while they afford a ready refuge to pedantic ignorance, they prove a sore perplexity in the attainment of real knowledge. Like the rude and wild fastnesses in an uncultivated country, they are a safe covert to a conquered, but a sore obstacle to a conquering army.

When we go to war with an enemy, it will sometimes happen that those among his forces, whether as spies or soldiers, who are most inveterate against us, will be found to be either persons who have been discarded from our service, or who have deserted it through disappointment in their hopes of obtaining promotion in it, on account of worthier objects being selected in preference. Just so must it be as regards many of the objections urged against certain of the theories which are here advanced. And not improbably the most plausible of these objections will

⁷ c. vii. ss. 3, 7.

⁹ c. vi. ss. 10, 11, 12.

⁸ ss. 4, 5, 6.

be discovered to depend on the truth of propositions which have already suggested themselves to the writer, and have only been abandoned after due consideration, for those which he now, after the fullest deliberation, is induced finally to adopt.

The object of the author has been a sincere and urgent desire for the discovery of truth, which alone has guided him in his investigations, and directed him with regard to the results at which he has arrived. He cannot indeed deny that on certain points connected with this study, he has found occasion to alter his opinions, as he examined them more minutely, or gained more knowledge of the matter.¹ Some theories which originally appeared exceedingly plausible, he has been ultimately led to abandon; although he must at the same time declare that he has never made any change of importance in his views, or been confirmed in any opinion, without a calm survey of, and a deep investigation into, the evidence which was presented to his mind. In the same fair and impartial manner does he therefore claim to have his principles judged of by others.

In the prosecution of this study, he has examined extensively into the general scheme of nature at large, both of man and of the animal kingdom; and from the economy of the latter he has, as already observed, derived much information respecting, and obtained many suggestions with regard to, that of human nature.

The common opinion of mankind at large on many topics, we may consider as well deserving of attention, and of the most careful investigation, especially their sentiment respecting the causes of the several varieties in human nature, the distribution of the intellectual powers, and their different operations. Some, indeed, may perhaps be inclined to sneer at the notion of learning philosophy from the vulgar, and may ridicule the idea of regarding the common herd of mankind as the teachers of wisdom. But those who consider philosophy as "the true knowledge of things,"² and value it so far only as it is based on truth, and founded on experience, will not esteem any information the less reliable because the lowly and unlearned, who have at any rate the signal merit of being the least prejudiced, originated or supported it. Many flowers of the sweetest fragrance and the loveliest hues, and herbs endowed with the most precious virtues, flourish in uncultivated wilds; and gold is discovered, not in

¹ *Faraday*, whose main calling and most successful efforts were as an experimentalist, perhaps went to an extreme when he asserted that "the only man who ought really to be looked upon as contemptible, is the man whose ideas are not in a constant state of transition." If each opinion which we form was to be fixed and final, there could be no advancement in science. But, on the other hand, if no opinion whatever is to be fixed, there can be no resting-place on which to depend in our advance. The mind should be ever open to conviction; but it does not follow from this that it should never be convinced.

² *Locke*, *Essay on the Understanding*. Preface.

beauteous valleys or arcadian bowers, but in foul dismal pits, and amidst noisome slime and pestilential vapours. What the universal experience and consent of mankind have sanctioned, may generally be supposed to be correct, if the fact is of a nature fitted for their comprehension, and they have no bias to influence them to an erroneous decision. However they may be perplexed by refined subtleties of reasoning, honest simple men are seldom wrong in observing matters which are before them; and the expressions and names adopted by the vulgar, commonly make up in aptness, and force, what they lack in refinement and beauty. How few, indeed, would hesitate in choosing a guide across a rugged and wild country, to prefer the clown to whom each pathway and object were familiar, to the philosopher, who could explain with the greatest learning and eloquence the causes of the various aberrations of nature which were there exhibited, and who had the most extensive acquaintance with the geography of the globe in general. It is also notorious, that men of plain and unsophisticated understanding, such as are the generality of mankind, with moderate and correct powers, and habits of observation, make the best witnesses; and are usually, if not universally, very preferable in this respect to men of lofty genius, and highly-cultivated intellects.

Revelation has also liberally opened her rich stores of knowledge afforded for instruction in this study, in various ways. In the Bible indeed are to be found the germs of many of the greatest truths in mental philosophy. Like the costliest treasures in the material world, these however often lie far below the surface, and are hidden from the idle or careless wanderer; while the deeper we dig for them, the more abundant will they appear.

The author has therefore not hesitated on several occasions to refer to the authority of the Bible with regard to many matters of importance adverted to in this work, not indeed on account of its generally received authority as the product of inspiration; but simply because, independent of any claim of this kind, it does appear to him to be the deepest, the soundest, and the most satisfactory exponent of many topics of perplexing difficulty relating to the subject here embraced, and to contain the most complete and comprehensive system as regards the philosophy of man, anywhere to be met with. The views there expressed seem to be also in exact accordance with nature, and entirely consistent with scientific deduction.

At the same time the writer has not hesitated, whenever he felt himself called upon to do so, to express his dissent in terms very decided, from the interpretations which have by certain theologians been propounded as to the meaning of several portions of the sacred Scriptures, which were neither warranted by authority, nor upheld by reason.

Two great errors in interpreting the Bible philosophically, are the want of a spirit of candour, and of a spirit of comprehensiveness. Many people do not study the Bible to ascertain its real meaning, but twist and turn it so as to make it support their erroneous views. Such men seek not to learn of God; but presumptuously aspire to teach God, and to pervert His truth to uphold their error.³

On the sublimest of all subjects, the nature of the soul, and of a future state, there is contained in the Bible a vast mine of information, which however appears to be but darkly and mysteriously hinted at, if we had but the skill to explore it; and as we advance in the investigation of this exalted topic, we shall only be made aware how completely the Bible, and that book alone, has anticipated us here. It will then be perceived, and perhaps with astonishment as much at our own shortsightedness as at its wisdom, that there all our profoundest discoveries were already developed. And it may be that in a future state, when these great mysteries shall be fully unravelled, our main wonder will be that we did not more abundantly avail ourselves of its teaching on this grand theme.

The illumination which Scripture affords us as to these matters of deep mystery, which are quite beyond its direct province to inform us concerning,—owing, possibly, to the dimness and slowness of our intellectual vision,—not so much resembles the constant and clear light of the planets, as the sudden and vivid flash of the lightning, which emits a brilliant effulgence for a moment, just allowing time to trace the forms of any objects, and then leaving us in utter obscurity. Indeed, the result of its glare is not to dispense light, but rather to dissipate darkness. So of the information that Scripture supplies on these points, which is oftener by hints and symbols than by direct instruction; and appears to be intended more to dispel dangerous error, than to diffuse any direct and determinate knowledge on the subject.

³ *Mr. E. Burnett Tylor, F.R.S.*, author of “*Primitive Culture*,” from which valuable work quotations will be found in the following pages, looks forward to a second reformation in religion, in which science and nature will exert their due authority in the interpretation of Scripture; and which reformation, he foretells, will be more extensive than the former one. Such a reformation every friend to truth, and to real religion, ought to desire; a reformation which will purge Revelation from the perversions and misrepresentations which have been put upon it, and bring science and religion into friendly relation. Such a reformation will do more to suppress infidelity than any other proceeding which could be adopted, and for which the recent revision of the Bible may prove to be the prelude. Such a reformation, however, will not be sudden, partial, violent, nor transient; but gradual, general, steady, and permanent. It may be said to be even now in progress with the progress of thought, of inquiry, of science, and of knowledge of each kind. Religion itself will only gain strength, and shine brighter after the trial.

Nevertheless, as regards the copious supply of information which has been in a direct manner imparted for our use with respect to human nature in the Sacred Volume, and also the manner in which our investigations on this subject are guided by it, the Bible has done much to facilitate the advancement of this important branch of human learning.⁴ If, indeed, anything were wanting to prove that the Bible was dictated by Divine inspiration, and that it was not a mere human composition, the sketch that is therein given of human nature in all its various forms and phases, so true and so just, would be alone sufficient for the purpose. It would be utterly impossible that man, or that a society of men, could compose any narrative that would afford so true, so faithful, so unbiassed a representation of mankind, as we here find effected. Their very prejudices, in favour of this or that vice, their unjust leniency towards certain failings of our nature, would entirely hinder them from the performance of it. The actual characters which are there described could not by a human portrayer have been delineated with such strict impartiality in the narration of their various virtues and follies,—such just judgment passed upon each part of their conduct, without at all deviating from the line of truth,—as is here done. Man has neither capacity, nor strength of mind, for such a task. We see it achieved in no human undertaking. Each one of us has too much admiration and love for our own nature not to desire to exalt those few excellences with which some have adorned it, beyond what is really just. The Divine Author of the Sacred Volume only, Who is at once raised far above all such weaknesses and prejudices, and Who also knows what is in man; Who took human nature upon Him, and became acquainted with our frailty, and our blindness, is alone capacitated for such a task. Accordingly, in the Sacred Volume we do perceive evident tokens of the Divine Nature of its Author.

If however it should be thought by some that the subject here submitted to our consideration is beyond the reach of human intellect satisfactorily and scientifically to solve; yet even in that case the contemplation of this, the noblest of human studies, and the most fit for man to engage in, may not be found altogether unprofitable. Our inability to follow it as it deserves, may moreover conduce to humble us with a sense of our in-

⁴ On this topic, *Mr. Isaac Taylor* aptly remarks as follows:—"In relation to the unseen world, Scripture is to be listened to much as we might listen to an ambassador from a distant country, who, while earnestly discharging the special duties of his mission, and while urging at large the political and commercial interests of his sovereign, might make many allusions, and employ many phrases, which when collected and attentively considered, would serve to convey some general notion of the climate, usages, and wealth of his native land."—*Physical Theory of Another Life*, chap. i.

firmity and incapacity, as even our selves are discovered to be beyond our present range of perception. In eternity alone, will be unfolded to us not merely a complete acquaintance with the nature of our own being, and of the universe at large; but then, and then alone, will the Author of that universe, and of our own being as well, be made comprehensible to our understanding.

ISELIPPS MANOR, NORTHOLT,

February 16th, 1876.

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A PHILOSOPHICAL TREATISE, ETC., ON MAN.

PRELIMINARY DISSERTATION, ETC.

I. ORIGATION AND PRODUCTION OF ANIMATED BEINGS.

OF the various pursuits which engage the attention of man, and by which his different capacities, so wondrously and so extensively adapted, may be advantageously exercised, there is doubtless none which is at once so fit to occupy his mind, and to develope to the utmost his highest powers, as the investigation of his own nature, and the acquirement of a correct principle as to the mode of directing aright those sublime endowments. Difficult as the subject on the outset may appear, yet its immense value to us all should effectually secure us against being deterred from following it. And its lofty nature, so far from scaring us against its approach, should only the more ardently excite our aspirations to ascend to that proud eminence. The topic is one which may tax all the efforts of the most highly gifted, although, on the other hand, the most slenderly endowed may engage with profit in a study which concerns immediately the interests and the happiness of each alike. Profound as is this vast subject, so that the mightiest intellects have been unable to fathom its sublime depths; yet few have attempted to dive beneath the surface, who have not brought up treasures which amply repaid all the pains of the exploit. Nevertheless, although man on earth may doubtless accomplish much in the pursuit of his investigations into this grand theme, in eternity alone will his knowledge here be perfected to the full. Darkness at present envelopes our path in each direction. In the condition to which we are all alike approaching, and then alone, will our

desire for information on this sublime topic be gratified to the full.

The discovery of the mode in which creation in general, animate and inanimate, first sprang into existence; the various processes, if we may so presume to term them, employed to carry on and complete the mysterious operation; and how out of one mighty chaos, or, more perplexing still, out of absolute nothing, matter was formed and moulded and organized, and life and intelligence were summoned into being, are subjects which are alike beyond our power to investigate and our weak faculties adequately to explore. Our ignorance here is not only profound, but perfect. Our impotence is not merely infinite, but hopeless. We have, indeed, neither powers proper to pursue the search, nor materials on which to base our calculations, had we the ability to upraise the structure. Denizens of this terrestrial orb, we must rest humbly content to walk upon the earth, although we may presume to gaze into the heavens. But while we are unable to soar into the planetary spheres, we are under no prohibition to explore the surface of those mystic regions, by the application of such means as through the aid of reason and the light of philosophy we have obtained. So also, although of the actual primary origin of all things, we can no more know anything certainly than we can ascertain the nature of their real essence; yet as our inability to discover the latter does not deter us from searching into their perceptible and tangible qualities, so neither should our ignorance of their actual origin prevent us from endeavouring to ascertain, so far as our faint faculties will serve us, such matters as are cognizable to us concerning the nature of that origin.

The universe and its inhabitants, animate and inanimate, intelligent and unintelligent, must necessarily have had some originator and creator who was pre-existent to them. The powers of the Being creating them must necessarily also have been of an order equal to this stupendous undertaking; and such a Being must moreover have been endowed with qualities at any rate equal to, and possibly superior to, those which He conferred. Some original creative intelligent Being must therefore have existed before all other beings from all eternity, and have been consequently self-existent. If this Being existed before all other beings, animate and inanimate, intelligent and unintelligent, it must necessarily, therefore, have been their originator and creator; unless they can be supposed to have originated and created themselves. No being, however, can possibly be self-created, as it must necessarily be existent in order to possess the power to create. Much less can it be supposed that any being is self-existent, when there is a power by which, and by which alone, it may have been created.

Indeed, if the universe could be supposed to be self-existent,

which it appears difficult and, indeed, almost impossible even to conjecture, the material unintelligent part of it must still require some power to direct and superintend its movements, which could not possibly be done by itself. And there would also be the necessity, still existing, for some active, intelligent power by which the continuous process of creation and growth could be carried on, and which that universe itself could not be capable of effecting, but which the supreme intelligent Creator alone could accomplish.

The origination by creation or otherwise of different beings and existences and intelligences in the universe, must therefore have been necessarily either effected or directed by the one eternal supreme original creative intelligent Being. He created all things. All things emanated from Him. He alone produced and called into being original substance as well as intelligence, varieties in the former of which man can combine, and so produce new modifications and compounds. But man can create nothing, which is the prerogative of God alone. The Almighty also conferred the generative power by which all things were procreated that were the offspring of other creatures. Such a being is God, the origin, the author, and the director of all things, animate and inanimate, material and spiritual.¹

¹ *Socrates* held that there are three principles of all things—God, matter, and ideas. God is the universal intellect, matter the subject of generation and corruption, idea an incorporeal substance, the intellect of God; God the intellect of the world. He also remarked that the supreme Being, the director and governor of the Universe, is exhibited in His operations.—*Plutarch, Plac. Phil.* i. 3.

Cicero thus expresses himself on this great subject:—"What can be so plain and evident when we behold the heavens, and contemplate the celestial bodies, as the existence of some supreme divine intelligence by which they are governed?"—*On the Nature of the Gods*, b. ii.

Behmen defines God to be the original root or foundation whence other species bodies and things originate, as from a supreme power.—*Principles of the Divine Essence*, i.

As some persons may deem an apology necessary for quoting authoritatively from this very remarkable and original, and most suggestive, although occasionally extravagant and mysterious writer, I may here observe that *Behmen* was much studied by *Newton*, as is even admitted, although somewhat reluctantly, by his biographer, *Sir D. Brewster*, *Life of Newton*, vol. ii. p. 371; and who, although he may have borrowed nothing from him, doubtless owed him much in the way of suggestion. *Coleridge* too, not only studied *Behmen*, but is said to have annotated certain of his works.

Locke asserts that our knowledge of the existence of God is the most obvious truth that reason discovers, and that its evidence is equal to mathematical certainty.—*Essay on the Understanding*, b. iv., c. x., s. 1.

Sir Isaac Newton observes of God that "we know Him only by His properties and attributes, and by the most wise and excellent structure of things, and by final causes."—*Newton's Principia, Scholium Generale*.

Kant's reasoning on this great subject, although less satisfactory, is not

The foregoing inquiries and investigations, however profound in their nature and perplexing in their conduct, as they undoubtedly are, must nevertheless be deemed requisite to be instituted before we enter upon the consideration of man himself, especially of the highest and noblest department in his constitution, his intellectual and spiritual being. As the soul is the essential part of man, so questions relating to the soul are the nearest of all connected with man. Nevertheless this subject is condemned by many as unsuitable to our capacities, and unsatisfactory as a branch of philosophical inquiry. The topics here proposed for discussion may be regarded as difficult of solution, as they undoubtedly are, but this ought not to deter us from engaging in them as far as we can. The neglect, and even contempt, into which such studies have fallen, is surely rather a reproach to the age and nation which tolerate calmly such contempt, than any real degradation of those lofty pursuits themselves. We lose sight of the planets in the glare of day, not because those glorious luminaries have actually faded from the heavens, but because our eyes are not fitted then to observe them. If but few persons have satisfactorily engaged in the investigations here proposed for our consideration, men of the greatest capacity and the loftiest genius have ever been so occupied. If they have engrossed the attention of but a limited number of persons, there are none so immediately important to us all. If inquiries of this sort are to be condemned altogether as too speculative and chimerical, this is to forbid all efforts at originality, and all attempts to advance science. If investigations of this profound nature are pronounced unsuitable for the present superficial style of study, the age itself, not the pursuit, is that which should be censured. If it be objected that all the knowledge which we can accumulate upon this subject is but uncertain and unsatisfactory; I would respectfully ask on what other subject of human inquiry, among the many that engage mankind, are we able to arrive at conclusions absolutely conclusive and complete? Of matter itself, to the contemplation of which we are so devoted, we in reality know little more that is certain than we do of mind, of body than of soul. And yet surely that which is the essential part of us is well worth attempting to know. If we abandon the science of mind simply because we cannot attain to all that we aspire in regard to our researches, we must abandon astronomy also, the loftiest of material sciences. If we prohibit the investigation of our spiritual being on the ground that many of

without its value. He contends that everything which does not contain a contradiction is held to be possible; and as the idea of a supreme being does not imply any contradiction, because being all reality it excludes all negation and contradiction, its experience is therefore possible.—*Critic. of Pure Reason.*

our deductions must be unsatisfactory and indefinite ; we must prohibit also the pursuit of ethics, the only solid foundation of moral duty, and the only certain landmark between right and wrong. If we pronounce all metaphysical researches of the nature proposed to be fruitless from the contradictory character of the conclusions arrived at ; on the same pretext even the study of religion must be acknowledged to be equally so, and whose mysteries eternity alone can completely unravel. Inquiries which have riveted the close attention, absorbed the mighty minds, and exhausted the powerful intellects of such men as Aristotle, Plato, Socrates, Cicero, Bacon, Locke, Hobbes, Des Cartes, Behmen, Newton, Kant—names, any one of which would render any pursuit respectable, and raise from contempt any mode of study ; men, indeed, of whom the present age of philosophy is scarcely to be counted worthy—cannot surely be below the notice, or unworthy the regard, of philosophers of the highest rank. Writers of this class may long have fallen into neglect, notwithstanding their depth and originality. I have not, however, hesitated to consult them fully during the progress of these pages, and have endeavoured to deduce from their acute and subtle, although very opposite reasonings, such conclusions with regard to each topic debated as appeared to me most sound and correct. The utmost merit, indeed, that I can desire for this work to possess is that it be found to be animated by the same lofty spirit by which they were inspired ; and that a portion of that penetration and that wisdom which characterized their researches and their speculations, may be deemed to have directed mine.

It is nevertheless very important, and indeed essential, that some clear and definite principle should be established and maintained as regards the legitimate province of both speculation and observation as a mode of philosophical investigation ; and that the limit and proper application of each should be distinctly and unequivocally ascertained and marked out. To certain great philosophers, however, whom we especially admire for their close and accurate power of observation and of amassing facts, we fail to give the credit they deserve for originality and speculative power and effort ; while, on the other hand, to others of those distinguished men whom we applaud for their originality and speculative boldness, we do not allow the credit to which they are entitled for their extensive observation and laborious researches. Indeed, desirable as it undoubtedly is that the province of observation and speculation should be kept distinct, and that each should be applied and confined strictly to its legitimate department ; yet, on the other hand, due regard to this principle need not prevent the same minds being devoted to both pursuits, so long as this application is in each case limited to its proper province. I would go even farther

than this, and say that not only do observation and speculation aid each other, but they should ever proceed together, and the one without the other proves barren and fruitless. All speculation should be grounded on observation, and all observation should be turned to account in speculation. As in the case of male and female in the natural world, so long as they live alone they are barren and childless; it is only by their union that they become prolific. Bacon, the most observant of all philosophers, indulged much in speculation also, and attempted here the loftiest flights. So was it also with Newton and Locke, with Des Cartes and with Behmen. As in commerce so in philosophy, it is seldom that anything extensive is accomplished without resort to speculation. If Newton and Locke had been content with observation only, and never advanced to speculation, where would philosophy be now?

Simply because some speculations unskilfully or injudiciously conducted have proved barren and useless, or have even been productive of delusion, are all efforts of this kind to be condemned and abandoned? This is like neglecting to explore the earth for treasure, merely because some mines which have been opened have turned out to be worthless. Upon this principle we ought to abandon all future voyages of discovery, because certain of our explorations have proved abortive, and even disastrous. To despise and neglect speculation altogether, is to throw aside the ladder by which alone the heights of science are to be scaled. To forbid speculation is to forbid the advancement of science. To discontinue it is to terminate the progress of discovery. Moreover, if the intellects of some men are considered to be too obtuse or too gross for refined and elevated studies, it is surely somewhat unjust that all the rest of mankind should be condemned to abstain from such inquiries. Contemplations in which the greatest minds have delighted to engage, cannot surely be wholly without their value to ordinary mortals. But if in that most important of all studies, the study of man, the inquiry into our own nature, we prefer the material frame to the mind, and disregard the latter to investigate the former; what is this in reality but to neglect the substance for the shadow, the fruit for the kernel, the corn for the chaff?

1. *By Direct Creation.*

There are three distinct modes in which all living creatures of whatever kind or description have originated, and by which they have been produced, which are as follows:—First, by immediate creation, which must have been the case with regard

to all creatures primarily, including man. Second, by emanation from some other being of the same species, already created or existent, as is still experienced in the propagation of certain of the lower animals, and occasionally of plants. Third, by sexual generation, which is the ordinary course, both among mankind and animals, and also plants. This last manner of propagation only, necessitates the existence of different sexes.

All animated beings were in the first instance originated and brought into existence through direct creation by God, and were adapted and ordained by Him to continue the succession of their species from one another by the two modes of emanation and generation, according to their particular respective endowments and constitution.² And as all things were produced originally by immediate creation only, and afterwards by creation emanation and generation; so there is nothing unreasonable or unnatural in supposing that what is incorrectly termed spontaneous generation—and which upon careful and close observation may be seen to be in operation in various parts of nature, in the springing into life of animalcules and plants, but which is in reality nothing more nor less than the continuance or repetition of immediate creation—is still in progress, and consequently at the present time goes on as well as and in conjunction with emanation and generation, and is ever and constantly occurring.³ The one process is really and essentially as much the operation of nature, and under the control of the Deity, as is the other. Neither the one nor the other are performed without His aid, and both of them owe their force and efficiency to His giving effect to the means adopted. So far, indeed, from production by what is termed spontaneous generation affording proof of the non-necessity of a creative and superintending Providence, it in reality supplies more direct incontrovertible and conclusive proof of the absolute necessity of such a Being, than does production by

² *Behmen* lays it down that all things are come to be something out of nothing, and every creature has the centre or circle of the birth of life in itself.—*Principles of Divine Essence*, c. vii., s. 35.

³ *Lord Bacon* asserts that “some living creatures are procreated by copulation between male and female; some by putrefaction.”—*Natural History*, cent. ix., 900.

Harvey also held that certain animals are engendered of putrefaction.—*Anatomical Exercises*, p. 93.

Sir Matthew Hale expressed his opinion that “some insects are originated without any formal seminal production; some out of putrefaction, some out of vegetables, some by very strength and *fracado* of the earth and waters quickened by the vigorous heat of the sun, which infuseth into some particles of matter well prepared and digested, a kind of vital and seminal principle.”—*Origination of Mankind*, s. 4, c. ii., p. 306.

A recent eminent writer remarks that “Creation is not by fits and starts, but it is continuous in nature.”—*Maudsley on the Physiology and Pathology of the Mind*, p. 211.

either emanation or generation. In the case of creation this is effected directly and immediately by the hand of God. In the case of emanation and generation His hand guides the instrument used, but the end is accomplished by Him only indirectly instead of directly.⁴ Creation in its continuance merely serves to assure us by obvious and visible illustration what creation originally was, and whence and how all animated beings first sprang into existence.⁵

One theory has been started which appears to be adopted rather to get rid of the supposition of original creation than to establish any satisfactory principle of itself; and which is, that although original new creation cannot be supposed to be now in process, yet we may reasonably believe that certain animated corpuscles were formed when creation originally commenced, which are still in being, and are ever ready to unite and form living creatures of every variety.⁶ Creations are, however, constantly in progress, not only of living animals of each sort, but also of plants and crystals of different kinds as well. Take, for instance, the wonderful and varied and complicated crystallizations formed by hoar-frost. Are these the result of corpuscles of the nature alluded to, or are they new and original creations? No one will really suppose that corpuscles are resorted to, or in any way contribute to form the crystalliza-

⁴ *Sir Matthew Hale* while he thought that insects might be produced by *moleculæ seminales*, considered nevertheless that those seeds themselves were the work of omnipotent intelligence, and could not be the production of chance; and consequently that their creation was equally the work of the Almighty.—*Origination of Mankind*, s. 3, c. v.

He also remarked that some persons believed the very sun and earth to be endowed with a kind of vital and sensitive nature, so as to be able to spin prepared matter into vital and sentient *semina* for insects.—*Ibid.* s. 4, c. ii.

Buffon's theory was that there exist in nature a number of small organized beings, composed of living organic particles, which are common to animals and vegetables, and are the primitive and incompatible particles; and that the assemblage of these particles forms an animal or plant.—*Nat. Hist., Reproduction.*

In allusion to the supposed production by Mr. Cross of insects through electricity, the author of *Vestiges of the Natural History of Creation* remarks that "the utmost that can be claimed for or imputed to him is that he arranged the natural conditions under which the true creative energy—that flowing from the primordial appointment of the Divine Author of all things—was pleased to work in that instance."—*Ninth Edit.*, p. 115.

⁵ According to *Behmen*, the original of every creature may be found by their being and food; for every one represents its root, and will feed of its mother.—*Election called Predestination*, c. v.

Des Cartes considered God to be the first universal cause of all motion, who in the beginning communicated motion to matter.—*Princ. Phil.*

⁶ *Behmen* asserts that the sperm of all things is a spiritual, and to our outward eyes invisible *Ens*, containing all the powers and virtues, and every species which the visible world contains.—*Theosophic Questions Answered*, c. vii.

tions of hoar-frost. And yet their formation is as complete and as complicated as is that of plants and even of animals. But if their formation is the result of or effected by original creation, why should not that of insects and other animated frames be so too?

2. *By Emanation from other Beings.*

The second of the modes by which animated beings of certain kinds are originated, is that of emanation from other beings of the same nature and order as themselves, which takes place when a new independent creature is produced by severing from the frame of any creature a limb or other member of such frame, and placing it in a position or condition thenceforth to obtain nourishment and acquire growth, by means of which it becomes a separate animal of itself. Of this fact we have experience in the case of a polypus or a worm being cut into pieces, when the several particles each in time become distinct independent animated creatures. In these instances propagation of the species is effected by simply dividing into parts an organized animated frame, each of which is endowed with organization and vitality, so that when thus isolated it is prepared forthwith to develope itself into a separate animal, and is able to receive nutriment from external objects, whereby growth at once proceeds. The severed member partakes of all the properties and endowments of the main stock, as though it were still a portion of it, and were annexed to it.

The mode of origination and production by emanation is, however, most clearly illustrated by the instance of producing a new plant by a cutting from a tree, and either grafting the branch so severed on another tree, or placing it in the ground, whereupon it becomes of itself a new separate and independent tree, with members and organs and living properties as perfect and as fully adapted for all their requisite functions as those possessed by the original tree from which it emanated and was severed. In the case, however, of production by emanation in the foregoing mode, it appears essential that the material frame of the parent creature be so constituted that each separate member or limb, which can be thus severed, forms of itself a complete being, with organs and properties belonging to itself, independent of its connexion with the main stock.

In the case of flame also we have an instance of production by emanation, a particle of the flame being detached from it at once constituting a new flame in all respects, as complete and perfect

as that from which it emanated. Spirits may possibly be produced in a mode corresponding to this, one spirit emanating from the frame of another when a body is fitted to receive it, as in the case of a particle of flame attaching itself to a substance possessing ignitious properties. Production by procreation is indeed but a species of emanation, with this distinction, however, that in the case of emanation the offspring itself is separated without any previous independent generation; in the case of procreation, only the germ from which the offspring is produced is that which is separated from the male parent, although ultimately the offspring itself is produced by separation or emanation from the mother. Creation may be presumed to be the usual and ordinary mode by which animated creatures in general were originally produced; procreation, that in which animated beings are produced which spring from other creatures of the same kind; emanation the mode in which spiritual beings are produced.

In production and propagation by emanation, the new being so originated partakes exactly and in all respects of the character of the single being from which it sprang, and is at once of the same age and growth and condition and texture and temperament with those of its derivative stock. In the case of creatures produced by generation, they are entirely new formations, and each partake of and share the various qualities and endowments of both the parents from which they were derived.

3. *By Sexual Generation.*

The third mode in which animated beings are originated and produced, and which at the present period is the ordinary and apparently most natural manner—at any rate, that which is most perceptible to us—is by sexual generation, or procreation between the sexes, by which, through the union or conjunction of two corporeal frames of creatures of the same species, but of different sex, by means of generative organs fitted and adapted for the purpose, through which semen is communicated from the one sex to the other, or a commingling of that belonging to both is effected, a new substance is formed which possesses in itself a growing and fructifying power,⁷ and from or out of which a living being, of the same nature with the two frames so conjoined, is produced or originates,⁸ and

⁷ The seminal liquor, according to *Buffon*, is a kind of extract from every part of the body.—*Nat. Hist., Nutrition and Growth.*

⁸ *Harvey* remarks that “the sperm and prolific spirit of all living creatures goes from them with a kind of leaping, as if itself were a living creature.”—*Anatomical Exercises*, p. 28.

the fœtus of which living being is at once thereby generated.⁹

An illustration of the active and generative power which substances that are singly by themselves inoperative and barren acquire by being mingled together, is afforded by the case of the commixture of an acid and alkali in water, whereby these two substances at once obtain an active and energetic power, and from their union, and from each operating on the other, a substance of a third quality springs, which is in its essence and quality different from either of them, so that in both substances an essential change is produced by the conjunction.

The mode in which the seminal fluid operates after commixture, may also be illustrated by the case of seed thrown into the ground, whereupon its organic particles at once expand and increase, growing gradually into a plant. The fœtus in the case of animated creatures, as soon as it is fully developed, advances and transmigrates into an organic frame, and is then ejected from the womb, separated from the parent frame, and becomes forthwith an independent creature of itself. In the case of a bird hatched in the egg, the process of growth in the seminal organic particles is still more clearly exhibited, and may be observed through all its various stages.

The fœtus at first, and indeed until the birth of the animal, is in direct connexion with the body of the parent, and is nourished by its different vessels in the same way as, and as though it constituted, a portion or member of the frame of the mother. But when birth takes place, which consists simply in the separation of the fœtus, or infant into which it has expanded, from the body of the parent, such fœtus, now become an offspring, exists and carries on all its functions independent of the frame of the parent, which is thereupon and thenceforth as distinct from it as is the corporeal being of any other creature. In the case of certain animals, however, the offspring still continues to derive nutriment from the body of the parent by resorting to it as to any other substance adapted for the purpose, and drawing from it such food by suction.

The eye is one of the first of the material organs which is formed in the fœtus, not improbably commencing when the soul is implanted there, and growing and being moulded under its influence, and consequently, when completed, reflecting its character. We may, however, infer that there are two distinct modes in which the soul may be infused into the fœtus. It may

⁹ According to *Leibnitz*, in conception no new animal is produced, but a pre-existing animal is disposed to a transformation by which it passes into another species.

Buffon's theory is that reproduction or generation is only a change of form, occasioned by the addition or combination of living organic particles. — *Nat. Hist., Reproduction.*

either be contained in the semen of the male, which was conveyed to the female at the time of sexual connexion; or it may be communicated by the soul of the female parent to the foetus when the foetus is sufficiently mature to receive it. In the former case, the soul of the child is derived from the father; in the latter case, from the mother.¹

It might nevertheless be urged against the soul being contained in the seed of the male parent, and so derived from him, that it is unreasonable to suppose that a gross, unintelligent mass, such as the seed in question, should be animated by an intelligent soul; and also that the foetus itself, while and so long as it remains without intelligence, cannot be believed to be so endowed. In reply to this objection, it may, however, be contended that seeds and eggs, which show no signs of life, are endowed with vegetative and vital and instinctive principles, which are nevertheless only developed when the germ arrives at maturity. Such principles could not be derived from the parent bird or tree after the quickening of the foetus, as the egg or seed ceases to be united to it when it is cast forth. Besides which, the soul appears to animate and direct the growth of the foetus from the very earliest period of its commencing its progress.

As the instinctive being or spirit of the parent bird is not required to infuse life or spirit or instinctive being into the foetus of the chicken in the egg by a direct or immediate communication or union with it; there seems to be no reason why the soul of the mother should be required to infuse soul into the foetus of the child contained in the womb.

On the whole, therefore, I conclude that the soul of the child is derived from the father, not from the mother; that it was contained in the seed at the time of propagation, and that it resides in and animates and influences it from the first moment of its commencing its growth. Not improbably, however, as the material foetus is fed and nourished by the body of the mother, so the soul of the foetus is in a corresponding manner fed and nourished by the mother's soul.

The circumstance, moreover, that the impregnation of the hen by the cock in the case of birds is essential to communicate vitality to the egg, may serve to fortify the conclusion that the spirit of the foetus is derived from the male. It may also be reasonably inferred that the child, although deriving its soul from the father, partakes mainly of the body of the mother. Hence the male is the plant from which the seed of the soul springs; the female is the soil in which the seed is deposited. While the essence of the seed depends on the

¹ In reply to the question, "In what manner the soul cometh into the man, or into the body?" *Behmen* asserts that the man soweth the soul, the woman spirit.—*Questions of the Soul Answered*, a. viii.

character of the male parent, it is, on the other hand, extensively influenced by the soil in which it grows up. And as the intellectual and moral character of each individual is in part dependent on the form and structure, and on the texture and temperament of the material organs through which the soul acts, and upon which it operates, and in part on the very essence of the soul itself; so our intellectual character, I should imagine, we derive mainly from our fathers, and our moral and medial character from our mothers.

Although it may be inferred that in the seed of the male the soul resides, yet when copulation takes place, and the seed of the male and female are mixed together during the process, it appears probable that at such period the soul is ignited in the rude incipient foetus formed out of the mixture of seeds. As the seed of neither male nor female will fructify alone, so neither alone will produce or bear a soul, but only the two when united and inflamed by the act of copulation. The seminal substance is complete and fructifying only when thus commingled and united, and then alone is capable of bearing a soul, or of receiving as a taper the flame communicated to it, which appears to emanate from the soul of the male parent, and through a succession of male parents, originally from God Himself;—a proof of its future immortality, as it has thus existed heretofore from all eternity.

4. *Development of Sex.*²

In the case of animated beings in general, they are distinguished into two main divisions running through the whole order, which are recognized by the term "sex," and whereby they are separated into males and females, those of each sex differing from those of the other as regards several of the most important qualities and characteristics belonging to each.

Sex is essentially a material, not a mental distinguishment. It is most forcibly developed, and its energies are chiefly exerted when the bodily frame is most vigorous and most completely developed. It is the least developed, as during infancy and old age, when the material frame is imperfect.³ A foetus, and

² The substance of this article was read as a paper before the Anthropological Society on the 1st of June, 1869, and was afterwards printed in the *Journal*.—*Anthrop. Review*, vol. vii.

³ "As with animals of all classes, so with men, the distinctive characters of the male sex are not fully developed until he is nearly mature; and if emasculated, they never appear."—*Darwin's Descent of Man, and Selection in Relation to Sex*, vol. ii. p. 317.

"Male and female children resemble each other closely, like the young of so many other animals in which the adult sexes differ; they likewise resemble the mature female much more closely than the mature male."—*Ibid.*

indeed an infant, can hardly be said to be of either sex, any more than an egg or an apple or a stone. It is, indeed, rather sexless than neuter. It not only belongs to neither sex, but it has not the characteristics of either.⁴

In the case of certain beings we find the two sexes united in the same individual, which is able to propagate offspring by itself alone.⁵ In other cases each individual unites in itself both the sexes, but requires contact with another in order to breed. Some animals are, as we have seen, produced quite independent of and without resort to sexual generation, and solely by emanation, as in the case of the polypi, which are said to be so formed as to be incapable of the act of copulation.

The object, if it may be so termed, in the development of sex among different animated beings, that is, of having the two different sexes each constituted in two different individuals, instead of both sexes being united or combined in one and the same person, as we see in certain vegetables and in some animals, and which might have been effected in the case of man, as also in the animal creation generally, appears to be twofold:—First, that by this means a constant variety may be occasioned in the propagation of the species consequent upon and corresponding with the variety existent in the two different parents, and which would not result if the offspring were derived from one parent only, as in the case of young plants produced by cuttings from trees, who would each be in all respects exactly like the parent. And second, that by this means the most intimate relation between certain individuals of the same species may be created and maintained, which we see most completely accomplished in the union of those of opposite sex, as in the case of marriage among mankind, and of pairing among birds.

In endeavouring to enunciate a theory upon which it may be presumed that the constitution of sex in different species proceeded, the following leading principles may be laid down as those which mainly directed the establishment of the system:—A difference in sex of at least two kinds is highly advantageous to all organized beings endowed with life and even vegetation, in order that by the energy and attraction towards each other thus excited, the activity of each may be developed, corresponding with the attraction towards external objects, and the consequent energy developed by the existence and excitement of

⁴ "Sex is fully ascertained to be a matter of development. All beings are at one stage of the embryotic progress, female; a certain number of them are afterwards advanced to be of the more powerful sex."—*Vestiges of the Natural History of Creation*, ninth edit. p. 133.

⁵ "In the lowest classes, the two sexes are not rarely united in the same individual."—*Darwin's Descent of Man, and Selection in Relation to Sex*, vol. i. p. 321.

the sensations emotions and appetites. In organized creatures endowed with instinctive or rational being, the creation of the two orders of sexes contemporaneously existing and in communion with each other, is almost essential for the complete existence of connexion of the closest kind between different members of the same species, which this difference operates so to attract one towards another. It is also necessary, for the continuation and increase of the species of each kind, that this should be effected through the joint action of two different beings of the same species upon each other, and not by the action of one being only, independent of any other, in order to ensure at each successive stage a constant divergence and difference in the nature of the beings produced from the parent stock, who, if all proceeded from the one parent only, would be all precisely like one another, a mere repetition of the single parent—impressions from the same type—saving only the slight and casual variation occasioned by a difference in health and age at the precise period when the different members of offspring emanated from the parent. It is moreover essential in the constitution of these two orders of beings of the same nature, thus to be brought into close connexion with, and to operate upon each other, that the propensities of the one should be of an active, those of the other of a passive nature; and that one should be a communicator, the other a recipient of the generative substance, which, by the joint operation of the two frames is to become the efficient cause of propagating the species. These two different beings of the same species must also, in order perfectly to adapt them for the ends designed, vary in degree from each other, instead of being entirely equal in point of size strength activity, and certain endowments arising out of and relating mainly to their material constitution and structure, as well as regards other characteristics in relation to or springing from the same qualities, although of a moral or intellectual kind. This difference in equality between the two sexes appears to be as essential in many respects as the very difference in sex itself. If both sexes were to be here alike, there would be little or no variation between them, and no benefit could result from constituting two sexes instead of one. Nevertheless this difference in sex, how essential and how extensive soever it is, being ordained for material purposes alone, is in itself and in all respects material only, and is in no respect spiritual or mental, except so far as the difference in material constitution between those of different sex influences also their mental and moral constitution. In the case of souls separated from the material frame, it may be presumed that no difference in sex exists, no reasons subsisting to cause or call for this difference. But in the case of souls united to bodies, there is this great and essential difference of

sex, although resulting only from a difference in material constitution. Nevertheless, the difference actually exists, and is extensive and essential; and so long as it is so ordained and does exist, it appears to be futile and acting against nature to endeavour to do away with or even diminish that distinction, which runs through all nature, and is essential to its very constitution and operation.

Organized beings of different species will however, it may be presumed, vary much as regards the mode in which this difference resulting from sex is developed, and in which it operates to affect these various beings. Nevertheless, in all cases, as the passive agent, or female, is the producer of the offspring, it must necessarily be its nourisher and its protector also during the most feeble state of its existence; and for this purpose it must be endowed with the material organs adapted for this end, but which are not required in the male sex. Creatures of this latter sex, however, being the protectors of the females themselves, as possessing stronger frames, must be endowed with the requisite organs for this purpose more extensively than the females. The material frame of the passive agent, or female, whose office it is to nurture the offspring, should be finer and of more delicate texture and temperament than that of the male. Where, however, the assistance and protection of the male are not afforded to the female during the period of production and nursing, as in the case of birds of prey, and some reptiles and fishes⁶ and insects,⁷ the frame of the female is not only larger, but is endowed with equal, sometimes with greater vigour and strength, and superior defensive organs, to those of the male.

The rationale, or final result of an inquiry into the theory of sex, in whatever order of beings throughout creation, appears to be this:—That in the spiritual being, independent of the material frame, one sex only is existent; but that when a material frame is created, through which other beings of a mixed spiritual and material nature are to be propagated, two sexes are indispensable,—one active and powerful, the other passive and tender or weak; the one superior, the other subordinate. The difference arising from this variety in material frame is essential and extensive, and by no efforts of cultivation or otherwise can the two sexes be rendered similar or equal. And this difference is highly conducive to the welfare of creation, and it is therefore expedient to maintain it.

Among beings of both sexes, whether human or animal, the power of sensation appears to be pretty equal, although possibly

⁶ "With many kinds of fish, the males are much smaller than the females."—*Darwin on Selection in Relation to Sex*, vol. i. p. 264.

⁷ "With insects of all kinds the males are commonly smaller than the females."—*Ibid.* p. 345.

the senses of the male are more vigorous, those of the female more delicate, corresponding with their difference in texture and temperament. Refinement and taste seem to be more exquisite with females than among men; and the quickness of women is greater, and their observation more alert. And if their sensations are more refined and delicate than those of the male, it may be inferred that the emotions and other feelings, originating in and dependent upon sensation, will be also characterized in a corresponding manner. The mental capacities of those of both sexes, originating entirely in the spiritual part of our being, are probably the same as regards their quality, although differing as regards their activity, vigour, and mode of operation, according to the nature and conformation of the material frame through which they are exerted, and in which alone, as I have already observed, the distinction of sex originates and exists. The main characteristic difference between the two sexes I consequently conclude to be as follows:—The male has the most energy, the female the most sensitiveness. And this distinction will, I believe, be found to originate and to rule the leading operations effected by those of each sex. It nearly, if not exactly, corresponds with and results from the material or physical difference subsisting between the two. As the male is materially, so is he also both mentally and morally more vigorous and courageous, and also more robust, and perhaps consequently less refined than the female. The female in fact holds a sort of intermediate position, mentally and morally as well as materially, between the adult and infant male.⁸

Coleridge asserts⁹ that the difference of sexes consists universally in the female being characterized by greater irritability, and the male by deeper sensibility. But surely the refinement in texture which would tend to produce the one, would tend also to produce the other of those qualities. From the greater delicacy and susceptibility of their constitution, females are generally more liable to excitement of each kind, and to emotion also, than are males; but probably the feeling in their case is less intense.¹ Nevertheless different men, and

⁸ "The sexes often differ in what Hunter has called secondary sexual characters, which are not directly connected with the act of reproduction; for instance, in the male possessing certain organs of sense or locomotion, of which the female is quite destitute, or in having them more highly developed, in order that he may readily find or reach her; or again, in the male having special organs of prehension so as to hold her securely."—*Darwin on Selection in Relation to Sex*, vol. i. p. 254.

"Differences of structure between the two sexes in relation to different habits of life are generally confined to the lower animals."—*Ibid.* 255.

⁹ *Theory of Life*, p. 83.

¹ Possibly Coleridge meant this, and by "sensibility" what I have here termed "emotion."

According to Mr. Darwin, "Man is more courageous, pugnacious, and energetic than woman, and has a more inventive genius. His brain is

the same men at different periods of life, vary far more than do men and women.

5. *Transmission of Qualities by Descent.*²

One of the most extraordinary and interesting, although at the same time apparently inexplicable circumstances connected with the production of animated beings, is the mode of the descent from parent to child both of intellectual capacities and moral endowments. We have conclusive evidence in the case alike of man and of animals, that certain physical qualities and peculiarities are transmitted by parents to their offspring; and that as regards the former, moral and intellectual as well as physical characteristics and talents are inherited by the offspring from their parents.³ There appear, however, to be two distinct modes in which qualities of each kind are ordinarily transmitted by human beings to their children. In some instances, which is probably the most common method, each child inherits, in some proportion or other, the various qualities, intellectual and moral, of both its parents, a sort of general compendium of their character.⁴ In other cases, instead of the various qualities possessed by the parents being inherited by each of the children, they are separately distributed singly or by one or two only, among the several members of the family, one of them inheriting this or that particular faculty or quality alone of one of its parents to an extensive degree, and another some two or more, instead of each of the children inheriting each of the principal capa-

absolutely larger, but whether relatively to the larger size of his body in comparison with that of woman, has not, I believe, been fully ascertained.” —*Selection in Relation to Sex*, vol. ii. pp. 316, 317.

“Woman seems to differ from man in mental disposition, chiefly in her greater tenderness and less selfishness; and this holds good even with savages.”—*Ibid.* p. 326.

“With woman, the powers of intuition, of rapid perception, and perhaps of imitation, are more strongly marked than in man; but some at least of those faculties are characteristic of the lower races, and therefore of a past and lower state of civilization.”—*Ibid.* p. 327.

“The chief distinction in the intellectual powers of the two sexes is shown by man attaining to a higher eminence in whatever he takes up than woman can attain—whether requiring deep thought, reason, or imagination, or merely the use of the senses and hands.”—*Ibid.*

² The substance of this article was read as a paper before the *British Association for the Advancement of Science*, at their meeting in Edinburgh, 1871, and subsequently before the *Anthropological Institute of Great Britain and Ireland*, on the 5th of February, 1872, and was printed in the *Journal of the Anthropological Institute*, vol. ii. p. 3.

³ See on this subject the able interesting and exhaustive work by Mr. F. Galton, F.R.S., on *Hereditary Genius*.

⁴ Sir Wm. Lawrence observes that “all the individuals of some families are characterized by peculiar lines of countenance; and we frequently observe a peculiar feature contained in a family for many generations.”—*Natural History of Man*, s. 2, c. vi.

cities and qualities of their parents. We observe distinctly this peculiarity in the transmission of physical qualities by animals, and there appears to be no reason why in a corresponding manner it should not prevail in the transmission of intellectual and moral qualities by man.⁵ With regard to children, while in some cases they inherit generally a portion of each of the qualities of both parents, in other cases those qualities will appear to be divided among different members of the family, particular children inheriting particular individual powers or qualities only of one parent, others those of the other parent. Or some of the children of a family will be found to inherit generally the various qualities of both parents, while others of the same family exhibit one or two only of those qualities obtained from one only of their parents. The origin and the efficient cause of this difference in descent it is difficult, if not impossible, wholly and satisfactorily to unravel.⁶

Probably, however, both the souls and the bodies of different persons vary, alike materially morally and mentally, at different times; and it may therefore be inferred that the character of the infant, in each of these respects, in a great measure depends upon the peculiar character which the parent assumed at the precise moment when either the child was begotten, or the foetus was quickened, and a soul communicated to it from that of the parent. On this account it may be that the children of the same family differ so entirely one from another, and have each some peculiar characteristics of their own. We inherit, moreover, from our parents, or rather derive from them, as forming part of ourselves, not merely a particular phase of mental endowment and of material organization, but also the peculiarity of texture and temperament and vital fluid and gaseous substances which they possessed.

In texture I should infer that the material frame of the infant

⁵ The distribution of qualities here referred to is closely analogous to what may be observed in the breeding of animals, as pointed out by *Professor de Quatrefages* in his valuable work on the *Progress of Anthropology*, where he remarks that in the case of the progeny of animals of different breeds, some of them will exhibit the breed of one parent, some that of the other. In this respect natural history is capable of throwing much valuable light on questions relating to man, and on none more than those respecting the descent of qualities, and the mode of their transmission.

⁶ "If a new character appears in an animal whilst young, whether it endures throughout life, or lasts only for a time, it will reappear, as a general rule, at the same age, and in the same manner, in the offspring. If, on the other hand, a new character appears at maturity, or even during old age, it tends to reappear in the offspring at the same advanced age. When deviations from this rule occur, the transmitted characters much oftener appear before than after the corresponding age."—*Darwin's Descent of Man*, §c., vol. i. p. 281.

most resembles that of the father, inasmuch as the substance of which it was formed was derived from the father. From our mothers we derive such qualities of the material frame as arise from or depend upon temperament, and to which early nutriment, the quality of the soil, as in the case of vegetation, and the fluids surrounding the foetus, would mainly contribute. The formation and development of the material organs are also principally influenced by the mother. Consequently in outward form the child must be expected most to resemble the mother, as being moulded within her frame, although the vigour of the male parent at the time of procreation may cause his seed to be endued with an energy that would overcome this influence. Hence offspring exhibit a resemblance sometimes to the father only, occasionally only to the mother, and in many instances to both parents.

Qualities and endowments of different kinds, physical moral and intellectual, do not however merely descend from parent to child in a direct manner, but in their transmission they are varied and modified in a great many different ways.

In the generality of cases it would seem, as observed before, that the qualities of the parents, medial moral and mental, descend to their offspring simply and purely, who represent, as it were, the stock from which they sprang.⁷ In other instances some slight modifications, apparently owing to and readily to be accounted for by the circumstances alluded to, are distinguishable. In all this there appears to be nothing to excite our wonder, but it is pretty exactly what we should be led to calculate from what we observe of the general operations of nature. In certain cases, however, a very different, and indeed opposite result may be remarked, difficult and perplexing as may be the effort to ascertain the real cause of it. In these instances it will be found that those peculiar qualities and endowments, both mental and moral, and possibly medial and physical also, which are possessed most largely by the parents, the offspring possess very sparingly; while some which the offspring possess very extensively the parents are endowed with but very slenderly. Education, considered in its most comprehensive sense, may account for this difference to some, though only to a limited extent. The main and essential cause of it I should conclude to be this: that particular qualities and endowments, when in any individual they reach their full development and utmost expansion, become as it were exhausted and worn out, and so descend to their posterity in a very degenerate or emaciated condition; while those which in the parents were but meagre and feeble, revive and become regenerated in the offspring, and appear then fully developed.

⁷ Sir W. Lawrence observes that "mental defects are propagated as well as corporeal."—*Natural History of Man*. s. 2, c. vi.

It appears to me, indeed, that the only true and philosophical mode of explaining the peculiarly interesting phenomenon in question, is by resorting to the supposition that there may be existent in our constitution certain operations and influences analogous to or corresponding with those of tide and reflux, exhaustion and repletion, action and reaction, wearing out and revivifying, in the material world, ever in process as regards the origination development and growth of our moral and intellectual qualities and endowments, as well as in the properties of our physical frames, which possess a never-failing influence as regards the transmission of those qualities, and their manifestation in the offspring, in the various ways which I have endeavoured to point out. Thus a particular moral or mental endowment may go on growing for generations in the souls of successive parents until it reaches its climax, when it will at once decline, like the flower which gradually expands and develops itself through various stages, but fades soon after its glory has been unfolded. Something of this kind is indeed perceptible as regards physical qualities, which we may observe to continue decreasing for generations in a particular breed of animals, the only mode of restoring which is by crossing the breed, and thereby infusing new blood into the stock.

The theory propounded by certain very ingenious though somewhat speculative naturalists as to the gradual growth and development of organic forms and animated beings, which are supposed to appear originally in the lowest condition of existence, and to go on advancing at each successive generation until they reach the highest stage, such as that attained by man, may to a certain extent be substantially true as regards the gradual growth of minds through successive generations in the way here stated; the soul that was feeble and undeveloped in the ancestor, by degrees improving as it became transmitted to successive descendants, until in a remote posterity, through the cultivation of mind received by the intermediate progenitors, it obtained at length its complete condition and entire development, and so manifested itself in the intellectual capacity displayed by such remote descendant.

Occasionally the child of a person of great talents is possessed of great talents also, but they are of an order and kind quite different to those of the parent, as the son of a lawyer is a great painter, of a poet a distinguished historian. Here it can hardly be said that the qualities or capacities descended from parent to child, inasmuch as in these two instances the endowments were quite distinct. But the efficient cause of the talent in the offspring must be attributed rather to the general vigour of the mind or soul itself of the parent, which, however, in the offspring developed itself in capacities totally different.

It may sometimes be remarked that where one child in a

family has an excess of any special endowment or quality, the others possess it to a very limited extent, which may arise from its having been exhausted in its abundant transmission to him alone. On the other hand, qualities of which he exhibits a very limited share, other members of the family may possess very largely.

In several instances it has been observed that persons are gifted with remarkable endowments and qualities, intellectual and moral, as well as physical, which they may be traced to have derived from their grandparents instead of their parents. In the case of disease this principle has been long recognized. And may not the hereditary descent of disease which has been for some time carefully observed, afford us a guide to trace out the mode of the descent of intellectual and moral endowments and qualities which has escaped, or at any rate has not secured, a corresponding amount of observation?

It may not unreasonably also be supposed that not only, as before remarked, the particular physical moral and mental condition of both the parents at the time of procreation has considerable influence on the character of the children, and may account for the extensive diversity among those of the same family; but events happening at the time of the conception of the child, and the peculiar pursuits of the parents, may largely affect the qualities of the offspring. So also the comparative age of the parents may have its effect in this respect, high-spirited children springing from parents who were young and vigorous, children grave and sedate from elderly parents.

The question whether artificial acquirements, as well as those which are natural, can be in any respect transmitted by parents to their offspring, involves a subject of inquiry of much interest, and no less importance. Many facts might be cited to prove that they do so descend, and that not only in the case of man, but in that of animals also.

If, however, intellectual capacities and powers which are vastly increased by cultivation, are transmitted by a person to his offspring in their improved state, and not as he originally inherited them; this is of itself a sure proof that the generation or transmission of being must be that of, or proceed from, the soul or spiritual being as well as the body. Even tastes and habits and prejudices acquired by the soul of the parent, have been supposed in some instances to have been communicated to the souls of his children, from which it might be inferred that the soul of the child was in reality actually a portion taken from that of the parent. In animals too, habits prejudices and acquirements are believed to be transmitted from parent to offspring, and both in man and animals this is observable as to appetite, and passion, and disposition.

In the case of physical peculiarities and constitution, and

form of features and of frame generally, as also complexion and size, the resemblance to and consequent descent from parents so characterized, are most easy to be traced, although probably they are not more real or extensive than are the transmission of moral and mental qualities and powers. Possibly as regards the material, so also as regards the intellectual or spiritual being, the endowments of both parents are to a certain extent, although in different proportions, communicated to or inherited by the offspring; and that in the course of several generations the souls of the descendants, as is the case with their bodies, may each separately exhibit the qualities of particular individual ancestors only, instead of each exhibiting them all, or many of them together.

In the breeding of some animals for domestic use, great skill and care are exercised in so uniting certain physical qualities, that the offspring may be endowed with those of the most valuable kind.⁸ May there not be certain mental and moral characteristics in the human race which, when they are possessed by the parents, may lead to the production of offspring in whom are united a class of capacities most important to be found together? Indeed much of the value of many endowments depends on their coexistence in the same mind.⁹

II. CONSTITUTION OF ANIMATED BEINGS.

EACH animated being, to whichever department of creation it belongs, is constituted of several different parts or elements, which, although blended together and united in one frame, are nevertheless separate and distinct in themselves, and demand so to be considered in any inquiry into their respective nature and attributes. Indeed, every being of this order appears to be from its very constitution essentially more or less complex, and to be made up of different materials or components, each of which is ordained to fulfil its appointed requirements in the formation, existence, and operation of the entire being. We experience this complex constitution of beings not only in various orders of nature, but it may be reasonably inferred to

⁸ *Sir W. Lawrence* remarks that "the formation of new varieties by breeding from individuals in whom the desirable properties exist in the greatest degree, is seen much more distinctly in our domestic animals than in our own species, since the former are entirely in our power."—*Natural History of Man*, s. 6, c. vi.

⁹ *Sir W. Lawrence* further observes that "if men in the affair of marriage were as much under management as some animals are in the exercise of their generative functions, an absolute ruler might accomplish in his dominions almost any idea of the human form."—*Natural History of Man*, s. 2, c. vi.

exist throughout the universe at large.¹ Each separate part or element in these several beings has its appointed and proper functions to perform; and every function is carried on through the agency of different elements and departments in its constitution, each varying from the other, and acting reciprocally one on the other.² To every animated frame, indeed, certain elements or principles are essential as regards the substance in which it exists or has its material being; the material or substantial form that it assumes, and by which it is visibly and tangibly distinguished; the organization through which it acts; the fluids and gases necessary in conjunction with its solidity and the qualities of that order, for its proper subsistence consistence and operative energy, as hereafter demonstrated; and the spiritual being by which it is animated and stimulated, and to which it owes its vitality and intelligence.

It is, however, proper, and, indeed, all important, for the sake of accuracy and precision in conducting the present inquiry, here to premise that by the terms "substance" and "matter," which are really synonymous terms, and which are perhaps generally only understood as the opposite or context to spirit, and to whatever is immaterial,—but both which latter terms in their turn fare no better in the way of precise or accurate definition than do their contexts,—I understand to mean in philosophical signification whatever being or existence possesses the qualities of extension and form, and occupies space and a certain specified place, so as to have some real and actual existence, whether it be visible or invisible, tangible or intangible.

Not only man, but all animals, and all plants as well, are of the complex nature and constitution here described, and the being of each of them is made up of the several distinct and independent parts and elements already enumerated. Inanimate bodies are not necessarily endowed with these various elements in their constitution, substance and form being alone essential to their existence. To substance itself form is requisite, but no other element which is indispensable in the constitution of animated beings. Nevertheless, although every substance has some specific form belonging to it, this form need not necessarily be either visible or tangible; or if it be visible and tangible, it is not consequently distinct and definite. Form may be also mutable (as is more or less the case with all animated forms), but not so substance which is pure and uncompounded; or even that substance which is compounded, where no vitality or other endowment is annexed to it which causes mutation in its essence

¹ According to *Des Cartes*, the matter of the heavens and the earth is the same.—*Princ. Phil.*, par. ii. art. 22.

² *Des Cartes* also tells us that there is no created thing of which we cannot make some use.—*Princ. Phil.*, par. iii. art. 3.

or form. Organization cannot subsist without substance and form. To fluid also substance is essential, and form too, although such form may be mutable and varying; but organization cannot be deemed necessary to either fluid or spirit. In what respect substance and form are essential to spirit, is a topic too comprehensive to be argued in the present section, but it will be considered in some of the subsequent parts of this work.³ The Deity must be inferred to possess substance and form also, although He is neither visible nor tangible. Indeed, into His essential nature we cannot presume to dive. Darkness and mystery envelope Him on every side.

The more complex any being is, the more immediately liable it is to dissolution by the disunion of its parts or elements, and it is consequently so far and in this respect the less durable.⁴ But a being may be dissoluble as regards the discontinuance of the union of its elements which constitutes such being, and yet durable as regards the permanence and indestructibility of each separate element, which is the case with our own material frames.⁵ Beings, if any there are, entirely without substance, are indissoluble, because they have no constituent elements to be disunited, and so cause their dissolution. They never cease to exist, simply because they never commenced to do so. Such are all merely arbitrary creations of the mind, as a name, a dignity, which possess no substance, because they have no real existence; and no real existence, because they have no substance.

In order to take a complete and comprehensive survey of the nature of animated beings in general, we must commence with the consideration of that portion of them which constitutes the substratum or material structure in which they reside, and which forms the vehicle or frame in which is deposited that animation or life and spiritual being, which is the real and essential part of them. To different orders of animated beings, different kinds of material structures or bodies are allotted, each specially adapted for the peculiar province it is intended to occupy.

We will therefore first proceed to inquire into the substance and essence of that material frame itself;⁶ then into the nature of the form that it assumes proper for such frame; and after that, into the nature of the organization with which it is endowed, and through which it is able to fulfil its respective purposes. The supply to it of fluids and gases of different kinds necessary to the action of such a frame, will subsequently be considered. And, lastly, the endowment of the frame in question

³ *Vide post*, s. v.

⁴ *Vide post*, s. v. art. 5, s. ix. art. 5.

⁵ *Ibid.*

⁶ According to *Behmen*, three things are in the original whence all things come to be—sulphur, mercurius, and sal. In sulphur is soul or spirit, and matter.—*Principle of the Divine Essence*, c. iv.

with some principle or being from which it derives its life and intelligence, will form a topic for examination.

1. *Corporeal Substance.*

To the material frame of every animated creature, there appear to be certain qualities and conditions indispensable in order to enable it to answer its essential end of becoming the vehicle in which the real being itself resides,⁷ and through which it exercises its several functions in relation to terrestrial and material objects.⁸ It must possess sufficient density to be both visible to the eye and palpable to the touch, and to afford resistance to contact with material substances. But at the same time it must be elastic and flexible in order that it may be capable of motion of various kinds, both as regards its change of position as a whole, and the movement of its different organs and members. It must also possess substantial strength sufficient to answer the several purposes which it has to fulfil, and to adapt it to sustain collision without injury with other substances of equal or greater density. Possessing this density and firmness, it must not, however, be so ponderous as to impede either its action of itself, or its locomotion. As regards both its texture and temperament, it requires to be so endowed that the substance of the frame will be permanently preserved in due order with respect to its regular and healthy condition.

In all these respects the body or material frame of man is at once admirably and completely constituted and adapted, and in each particular, as regards the substance of which it is formed, fitting it alike to be the organ of the spiritual being annexed to it, while it possesses sufficient strength density and elasticity to be the medium of communication with external material substances, and to resist contact with them. It is massive, and yet not too ponderous; porous and yet dry; capacitated at once to be the abode of a spiritual being, and to fulfil all the uses of a terrestrial material machine. There is, moreover, no other substance in nature with which we are acquainted that appears to be in every respect so admirably and completely qualified to fulfil all its appointed functions as is the flesh of which our bodies are mainly composed. It is firm and yet flexible. It stands an almost infinite extent of wear and tear. It is unaffected in any important degree by either moisture or dryness, and by any

⁷ *Dr. Henry More* asserted that God created matter for the good of souls.—*Letter 7, Life by Ward*, p. 291.

⁸ *Des Cartes* held matter to be one and the same through the whole universe, and to exist without limit.—*Princ. Phil.*

But the substance both of body and spirit are, according to *Locke*, alike and equally unknown to us.—*Essay on the Understanding*, b. ii. c. xxiii. s. 30.

moderate amount of either heat or cold. Most of the tissues are impenetrable to water, and yet porous enough for the passage through their appointed vessels of all the fluids belonging to the system. The bone and muscle are also in their texture and substance equally well adapted for their appointed ends.

The corporeal substance of which the frame of every animated being is constituted, is indeed made up of several different parts, and of many distinct elements, varying each from the other in nearly every characteristic that contributes to the quality of such materials. Certain of those parts and elements are solid, others liquid; some are hard, others soft; and several of them elastic also. These various elements and fluids, which are co-existent in each corporeal frame, acting on each other, form fresh combinations of themselves, and out of these combinations certain new and distinct independent elements arise.

Organized frames differ also one from another, not only as regards their substance, but in respect to the texture and temperament with which they are endowed, and which circumstance exercises important influences on the condition and conduct of such frame, and of each of its organs, in many respects.

By the texture of any frame or organ, is ordinarily intended the quality and substance of the material frame, its organs, fibres, nerves, and vessels, more especially as regards their relative strength, subtilty, pliability, density, elasticity, and sensibility, compared with other bodies.

Different frames, moreover, vary one from another, and in every respect, as regards the texture of the substance out of which they are formed, as do the several parts of the same frame in this respect. For instance, the mere corporeal portions, such as the trunk and limbs, differ from the organic, such as the sensorial organs. The texture of the brain is probably the most delicate and refined of that of any throughout the frame.

By the term "temperament" appears to be understood the peculiar state of the system common to several individuals, which results from the various proportions in which the elementary parts of the human body are mixed up together, and which gives rise to a tendency to certain phenomena. The ancients described four temperaments, corresponding to the four qualities of Hippocrates,—hot, cold, moist, and dry. By modern writers, temperaments have been distinguished as the nervous, the bilious, the lymphatic, and the sanguine.⁹ These different kinds of temperament are, however, in the great majority of, if not in all cases, more or less mixed;

⁹ According to *Behmen*, there are four kinds of complexions or temperaments, which he terms the choleric, the sanguine, the phlegmatic, and the melancholy.—*Of the Four Complexions*, c. i.

and this mixture not only modifies, but counteracts the original influence of each.¹ Both body and mind are affected and influenced by temperament, alike as regards their constitution, their action, and their condition, more particularly as to health and disease.

The most important consideration as regards texture and temperament which concerns us here, is that which relates to their influence upon the sensibility and irritability of the frame with respect to impressions upon it either internal or external. Irritability in the material frame, or any of its organs, consists in or arises from their liability to be at once and easily and actively excited by certain causes operating upon them.

Texture and temperament have, moreover, both of them doubtless an important influence, not only upon the bodily health generally, but also upon the character and operation of the mind, and of its faculties, as also on the flow of the fluid and gaseous vital substances. According to their texture and their temperament, certain frames are more elastic, more lively, more energetic, and more sensitive than others; and according to the quality of the frame, and the constitution of the organs on which the soul has to act, must extensively depend the character and mode of that action.²

It may nevertheless be objected to the perfect wisdom evinced in the construction of the material frame of man, that he might have been furnished with a body which would not have been liable to disease and injury, at any rate, to the extent to which our frames are subject, which are in this respect inferior to those of many animals. Had we, however, been endowed with frames of this very perfect nature and organization, we should be deprived of a large portion of the moral influence exercised upon us through our present condition, which is extensively accelerated by the excitement arising from the disturbances in the economy of our material constitution. And the circumstance that animals, even those of an inferior kind, do in some certain respects undoubtedly possess a more perfect material frame than we do, of itself proves that the imperfection of our system is not owing to any want of skill in the omniscient Framer of them all, but that it must have been intentionally designed. Indeed, no rational person can doubt that it would have been possible, and even easy, for the Almighty to have constructed a material frame for man not only far more

¹ It is laid down by *Paulus Aegineta*, that "That man is in the best temperament of body, when it is in a medium between all extremes of leanness and obesity, of softness and hardness, of heat and cold, of moisture and dryness; and, in a word, who has all the natural and vital energies in a faultless state."—*De Re Medicâ*, lib. i. c. 60.

² *Galen* wrote a treatise entitled *Quod Animi Mores Corporis Temperamenta signantur*, to establish the connexion between the passions and desires of the mind and the temperaments.

durable than that which he now possesses, but much less liable to injury and to disorder. The real question, however, is, whether a body more admirably and completely adapted to perform all the functions required in the case of man, physical, moral and intellectual, and to answer all the ends of his temporary residence here in a probationary state,—in which the very disorders and pains to which it is occasionally liable, and the feeling of frailty and decay inseparable from it, form an important and indeed essential part of that probationary condition,—could by any other than Divine wisdom have been devised. So far, moreover, from bodily perfection and strength affording a proof of the exalted position of any being, especially as regards its intellectual and moral state; we not unfrequently find that the lower any animals are in the scale of nature, more especially as regards their intelligence, the more complete are the endowments with respect to certain of their physical powers and organs with which they are gifted. On the whole, when we consider the wisdom displayed in the construction of our material frames, their wondrous and varied and perfect adaptation, as also in those of different animals and vegetables, each completely fitted, although in various and even opposite modes, to their appointed spheres; it cannot be doubted that if it had been the will of God, and He, in His infinite goodness and wisdom, had thought proper that these frames of ours should have been so constituted as to be free from liability to disease and disorder, and have been rendered invulnerable or immortal, and capacitated to endure for ever, He could with facility have so adapted them, and qualified them to last through countless ages, as has in fact been effected in the case of certain material inanimate things, such as the mountains and seas and planets, which exist from age to age, and continue apparently unchanged, and liable to neither disease nor to decay.

2. *Development of Form.*

In the selection of a specific form into which the material frame adapted for the several purposes already mentioned shall be moulded, infinite wisdom and foresight are called into requisition in order to fit it for the particular ends of such an instrument, which must of course in the case of each individual being vary and be regulated according to its precise and peculiar requirements and exigencies. As the nature, condition, and pursuits of these several beings extensively differ; so, corresponding with these variations, must be the shape of the material frame best capacitated for each of such beings. No special particular individual form has been adapted for animated bodies generally, although it would appear that the

cylindrical is that to which all living frames more or less and directly incline, while those forms in each case vary and are modified according to, and in order to meet the requirements of the particular animal; some, as serpents and worms, being very lengthy; others, such as fish, assimilating to the oval shape; and the generality of animal bodies being irregular, the different limbs and parts of the frame each tending to a different form, although the round is that towards which the bodies and heads in each case approach.

In the case of man, he is peculiarly distinguished from other animated creatures by the upright posture of his form, which seems especially adapted for a being whose pursuits are not entirely sensual, and exclusively devoted to objects which are on the earth's surface; but whose attention is to be directed, and whose faculties are to be employed in the pursuit of knowledge as well as food, and who is to hold converse not only with objects terrestrial, but with those also which are celestial.

Each material frame, to whatever animated being it belongs, is nevertheless at first created imperfect and shapeless, as we have seen in the case of the germ and the foetus, but gradually develops itself by the process of increase and expansion and completion which we term growth; and by means of which slowly and imperceptibly, but no less surely, the entire frame is matured alike as regards its form, its size, its organization, and in all other respects.

Every man, and indeed every animal, passes through several successive stages of existence, being those of semen, embryo, foetus, infant, child, youth, and maturity. And during each of these seven states of being, he differs from that which he had previously gone through, although gradually less so at each stage as his progress advances. An egg is but an embryo separated from the womb, and which grows into a foetus. From the egg the chick enters upon the world instead of from the womb direct. Thus we commence our existence in a liquid state, termed plasma, then progress into a mere solid speck, are afterwards promoted to shapeless jelly, subsequently advance into a soft homogenous substance, possessing some sort of rude shape, after this into a regular organized form, composed of a substance which is in part hard, in part soft, and in part fluid. So as regards dimension, we are at first but a mere undefined portion of fluid, then a diminutive floating atom. By and by we become of about the bigness of a barleycorn, and gradually advance from that size, through the foetus and infant stages, to our complete dimension.

A theory has been propounded, to which allusion has already been made,³ and which has excited considerable attention and

³ *Vide* p. 21.

discussion at different periods during the progress of philosophy, that man and animals of different kinds were not originally created in, or allowed to grow into, a perfect condition, but that they have gradually advanced from one state to another, being primarily only animals or animated forms of the very lowest order, until at length, through successive generations, they arrived at maturity, obtained their complete and final form and organization, and were fully developed, such as we see in the material frame of man. The only apparent support of such a theory appears to be afforded by what we may observe in the growth of a germ into a fœtus, a fœtus into an infant, and an infant into a perfect and fully-developed organized animal. But in this case it should be borne in mind that no actual birth, or entry into, or existence in the world takes place until the form and organization ultimately to be attained, which are accomplished in those of the infant, whether man or animal, are constructed. The true theory of "development" would therefore be, not merely that created animated forms gradually advance through successive stages, from very imperfect to very perfect shapes and organizations (and which is the real theory countenanced by what we observe in the progress of generation); but that at each of the several stages in the process of generation and puberty, the beings so progressing are both animated, and capable of birth, and of existing in the world, and propagating their species—who continue the growth which in their parents was interrupted by their birth—until at length, through successive generations, they arrive at that condition of perfect organization which their original progenitors would have obtained, had they continued in the womb until they reached the state of full development adapted for their being brought forth. In other words, man from the period of his procreation to that of his birth passes through several stages of development, as averred by Mr. Darwin; but he is never actually born, or produced in the world as an independent being, until he has reached comparative maturity, or that condition which we term infancy.

It appears reasonable to conclude that the gradual growth and advancement in intelligence which take place in man during his progress from infancy to manhood, are in reality the development not of the soul but of the body, except so far as the former is improved by exercise and the knowledge which it imbibes. The brain being the organ of the soul, and through which it performs most, although not all of its functions, the attainment of full development and growth by the brain is necessary to the proper action of the soul when united to the body; and we accordingly find, as is frequently the case with idiots, that injury to the brain, by impeding

the action of the soul upon it or through it, as its organ, causes what is termed mental debility to be manifested, which is, however, in reality, debility not of the mind but of the mental frame. Also, that where the growth of the brain is checked in childhood by disease, intelligence ceases to advance beyond what was acquired at that period.

3. *Construction of Organization.*

In the adaptation of a material frame for the various purposes of an animated being, it is not merely requisite that its substance and its form be duly qualified for the particular ends designed, but it is also essential that the frame in question be supplied with the several and special organs that are necessary to enable it to perform the particular purposes which its condition and nature demand, more especially as regards its action motion and operations in respect to other substances and beings as well as itself. It is consequently indispensable to every frame that is endowed with any principle of vitality, even of the lowest kind, that it possess a certain amount of organization, inasmuch as each such being must necessarily stand more or less in need of some or more of the capacities supplied by such organization, although the nature and the extent of this organization vary in different beings, according to their quality, and the particular object of their organization.⁴ Thus in vegetable frames the organization is very different to what it is in animal bodies, and vegetable and animal bodies vary one from another extensively in this respect.⁵

It is to be observed, moreover, that each organ, or distinct and separate instrument of organization, is perfect in itself, and has its own particular and independent purposes to perform. At the same time, each organ is connected with each of the other organs as being part of the same frame, and acting with and aiding them in the carrying on the several operations necessary for such frame.

The material frame of every living creature is, therefore, constituted and endowed with organs of different kinds, according to the nature and exigencies of that particular animal.

Among the capacities conferred by a system of organization, the following are the principal:—1. The power of imbibing foreign substances, as in eating, drinking, and respiration. 2. The ability to eject substances from the frame, as in evacuation, vomiting, urine, and perspiration. 3. That of perceiving

⁴ *Hunter* nevertheless distinctly expressed his opinion that organization and life are two different things, for a dead body is as much organized as a living one.—*Organization and Action, Works*, vol. i. p. 242.

⁵ *Harvey* tells us that plant-animals have no heat.—*Anatomical Exercises*, p. 93.

external objects, as by sensation. 4. The power of action, as in moving the body and limbs. 5. The power of locomotion. 6. The power of causing sound, of which speech is the principal. 7. The power of affecting, such as moving and dividing, other bodies.

There are two kinds of motion which material frames are capable of exercising—voluntary motion and involuntary motion. The former we are able to effect at our will, as when we voluntarily move a limb, or walk from one place to another. The latter kind of motion consists in the action of the different internal vessels and organs of our frames, which, without our care or exertion, are ever in operation. Motion is the product, not of life, but of organization. Vegetables have life of a certain kind, but, with very few exceptions, possess no power of motion, except as regards their internal fluids.

It is essential to every animated organized frame, that it be endowed with the various members and vessels requisite for carrying on the functions of life, although no particular individual exclusive shape appears to be necessary; and these bodies, as already observed, vary in every possible manner, not only as to their form, but as to their size, the mode of their construction, and the texture and temperament by which they are characterized. Indeed, a common connecting link, binding together all orders of animated beings, is established by the manner in which they are all alike organized as regards their material frame, more especially with respect to the vessels through which the different fluid and gaseous vital substances are transmitted, and the mode of that transmission. In the case, however, of trees, and of animals of the polypi species, each organic member would seem to constitute a separate individual of itself, which, although united to the parent trunk, may at any time be disjointed from it, and possesses also its own particular animating or vegetable principle, so that the member thrives independent of the main part of the body, and when divided from it at once becomes a distinct organized frame of itself.

It may for many reasons be inferred that the spiritual being of man more or less corresponds with his bodily frame, and that in a variety of ways. In an analogous manner, it will probably be found that the spiritual or instinctive being of each animal corresponds with its material structure; and that as that material being is to the material being of man, so is its spiritual or instinctive being to that of man also. Probably, moreover, every intelligent capacity, every moral disposition, and every medial endowment which is found in man, may be discovered to be repeated or represented, or at any rate typified and reflected in the animal creation.

Man even in his material frame, which is the meanest of his

constituent parts, bears evidence at once of his position at the head of created terrestrial beings, of which, as I have observed, there are numerous gradations descending down from him. His frame is a more complicated and finely-constructed piece of machinery than is any of theirs; although, as already remarked,⁶ certain of his animal powers are inferior, and his instinctive capacities are considerably below those of some animals. But as his pursuits, owing to his intellectual endowments, so exceed theirs in variety and magnitude, it is essential that his material organization should be more varied and more perfect. Animals, indeed, appear to differ much, according to the mode in which they are endowed in this respect. Thus the polype and the oyster, whose very simple organization seems to adapt them for little beyond imbibing nutriment and propagating their species, are apparently almost limited to such efforts, and are placed in a lower rank of created beings than that occupied by vertebrate animals.

The material frame of man might well be compared to Jacob's ladder, which, while one end of it reached to Heaven, the other rested upon earth. So as regards the human body, it is in parts so fine in texture as to be fitted to receive and transmit the operations of an intelligent spiritual being, and almost approaches to the confines of spiritual essence; while, as regards its other parts, it is capacitated for all the purposes of our gross animal nature.

This material frame, however, is but the instrument or organ of the soul or intelligent being, and is dependent upon it for the direction of all its voluntary operations and actions. Nevertheless, in every way, whether regarded as a whole or with respect to each of its minute parts, how perfect, how wonderful, how transcendent a masterpiece of Divine skill and wisdom is the corporeal structure of man! It resembles a highly-civilized country, with its roads and canals, and electric telegraphs, which convey needful sustenance and instant information to each part. Every function goes on with the utmost regularity, though ever progressing without fatigue; and the most insignificant member is not injured without the sympathy of the whole state. With chemical and mechanical contrivances of every sort, and of the utmost perfection, it is fully supplied. Within the vast empire in which we are located, many are the laboratories constantly at work for the production of different compounds; and wondrous is the industry ceaselessly exercised for the achievement of efforts of various kinds. Yet in the small compass of this bodily frame, prevails a degree of chemical and mechanical skill, and of untiring industry, beyond what even the united forces of the empire, with all their combined and co-operating ingenuity, are able to accomplish. When we contenti-

⁶ *Ante*, p. 29.

plate the numerous resources and appliances of every variety possessed by the mighty nation of which we are members; its means of communication of different kinds, its modes of transmitting traffic; its roads, canals, railways, electric telegraphs, rivers, and harbours; its mines, its rich pastures, its forests, and its plains; we are struck with astonishment, and admire alike the wealth that it possesses, and the wisdom which its several works and contrivances so extensively display. Most marvellous, though not less true, it is, nevertheless, that a single human body, in its nerves, vessels, and multifarious organs and endowments, possesses means and appliances as varied, as wonderful, and far more complete, than even all those together of which this great kingdom can boast. Thus, fluids are without intermission rapidly circulating; food is undergoing the process of digestion; respiration, and many other acts are in progress; each of which, however complicated and even apparently inconsistent with each other as they seem to be, are performed together, not only without the slightest inconvenience, but without our even feeling or being conscious of the process. Indeed, the mere circumstance alone of our experiencing sensations of any of these operations, may be regarded as an undeniable proof that the body is out of order; as when we feel the motion of the blood-vessels by the head or the heart throbbing, or that of the nerves by the trembling of the limbs. And so passingly ingenious is the machinery of our material frame, that nearly every mechanical contrivance which has been invented by the mind of man, has been discovered to be here in activity. So compact and so firmly built, moreover, is this vast and complicated and exquisitely adapted structure, that it is not only able to move all at once with great ease and rapidity, but it bears without injury considerable shocks and collisions with other bodies, far beyond what the strongest machines, made by man of the hardest materials, can endure, and which are at once shattered and ruined by such conflicts. Surely, of all material creations, even by God Himself, this is the most astonishing and complete, and may truly be said to be after His own Divine image and likeness. We only reflect on this subject so seldom because it is connected with us so nearly. That which concerns us so intimately, so little engages our interest.

4. Fluid and Gaseous Substances in Animated Frames, connected with Vitality.

The material frame constructed to be the vehicle or organ of an animated being, requires not only to be constituted of the particular substance, and to be moulded and organized in the

special manner best fitted for its several purposes ; but to this frame certain specific fluid and gaseous substances must be supplied, in order to adapt it for the various functions appertaining to such a body.

In what, however, does a fluid really and essentially consist ? What is its peculiar and characteristic nature, and wherein does it mainly differ from a solid substance ? A fluid may be defined to be a body whose constituent particles or atoms are each extremely minute, and each distinct and independent, and consequently, inadhesible one to the other, and at once movable and mutable as regards their mutual relation or connexion, on any change being made in the situation or position of such body ; whereas those of a solid body are adhesive and fixed, immovable and immutable, unless some considerable force is applied to effect an alteration in the form and particles of the substance in question. As a consequence of these qualities in the nature and constitution of a fluid, each part or atom of such a body is ever ready to separate itself from the other part, and from the bulk of it, by means of which it is able to enter and pervade other bodies, whose frames are porous, or perforated, or supplied with channels for this purpose.

Every organized animated frame is supplied with certain fluids and gases of different kinds, which circulate in various modes through its vessels, and are employed in several ways in the economy of the system. By what may here be aptly designated the vital fluids and gases, the properties of which alone it is within the province of the present article to consider, may be comprehended those active and volatile fluid and gaseous substances connected with vitality, which circulate through the whole material frame, and on which both the actual existence and the relative exuberance of vitality depend.

The several fluids and gases in question are of six different kinds, and may be comprehended under the following :—1. The blood. 2. The animal spirits. 3. The nervous ether or fluid. 4. Gaseous fluid. 5. Thermal fluid, in the heat which pervades the body. 6. Aerial fluid, in the air which also pervades it. Of these several fluids some, such as the blood, are compounded of separate elements ; others, such as gas, are pure and uncompounded. Different animated frames differ, however, extensively as to the degree and proportion in which they are respectively endowed with particular fluids and gases, and as to the quality of those substances, as also does the same frame at different periods, according to its condition in point of health, growth, and other circumstances. The temperament of the frame is greatly dependent on the nature and condition of the vital fluids by which it is pervaded. There are certain other secreted or excreted fluids existent in animated frames, or

in some parts of them, but which cannot be considered as contributing to their vitality, such as bile, urine, and perspiration, and also semen.

The character of the vital fluids and gases, which varies in each different individual, influences that of the material frame through which they flow, as does also in return the character of that frame that of its fluids and gases. So also the condition of its fluids and gases extensively affects that of the body, and the condition of the body that of its fluids and gases. A change in either is moreover reciprocated to the other.

Animals appear to differ one from another as much in regard to their fluids and gases as they do in regard to their external shape. The bee varies from the man as extensively in the quality of its cold and colourless blood, as it does in the form of its body.

The blood is the only visible and the only palpable and gross fluid of those which are vital, and appears to form a sort of substratum, if it may be so termed, of all the other fluids, as the material frame is of the whole system.⁷ It is also observable that the more perfect are the constitution and quality of the blood in any creature—the more nearly approaching to that of man—the higher is the intelligence of the being endowed with it,⁸ commencing with beasts most resembling man, and ending with insects and reptiles most differing from him in both these respects.⁹

The animal spirits appear to be a very subtle vapour or exhalation arising from the blood,¹ influenced by the opera-

⁷ According to *Hunter*, blood is the material out of which the whole body is formed, and out of which it is supported.—*On the Blood, Works*, vol. i. p. 229.

⁸ *Empedocles* sought for the soul in the substance of the blood.

⁹ *Hunter* considered the blood to be not merely fluid animal matter, but that it has also become vivified, and carries life to every part of the body.—*On the Blood, Works*, vol. i. p. 231.

¹ According to *Des Cartes*, the animal spirits are composed of the most subtle parts of the blood.—*Passions of the Mind*, part i. art. 10.

Burton defines spirit to be “a most subtle vapour, which is expressed from the blood, and the instrument of the soule to perform all its actions; a common tye or medium betwixt the body and the soule, as some will have it; or as Paracelsus, a fourthe soule of itself.” He also asserts that there are three kinds of spirits—the natural, the vital, and the animal—respectively engendered in the brain, the heart, and the liver. The animal spirits, he says, are formed of the vital.—*Anatomy of Melancholy*, part i. p. 15.

Willis says that “the spirits are a subtil and greatly volatil portion of the blood.”—*Works, Fevers*, c. i. p. 48.

According to *Harvey*, the blood that flows in the veins is imbued with spirits, and that in the arteries has a greater store of them, and in both cases the spirits are inseparable from the blood.—*Anatomical Exercises, Proeme*, p. 5.

De Back, the defender of *Harvey's* theory, refers to the accepted definition of spirits as “a very thin and subtle body, hot and most pure,

tion upon it of the air, of a highly rarefied and spirituous nature, which flows freely through certain of its vessels, or it may be in some of its fluids themselves, to all parts of the frame, and tends to exhilarate it according as the animal spirits are vigorous or abundant, and the deficiency in or debility of which produces depression to a corresponding extent. On the condition of the blood it therefore necessarily follows that the condition of the animal spirits must be to a great degree dependent. The state and quality of the air also largely influences the condition and quality of the animal spirits.

From the intimacy of the union between the soul and the body, and the reciprocity of influence existing between them, whenever the animal spirits are in full flow, or at a high ebb, the mind and the intellectual faculties will be also more vigorous and active. Causes operating on the animal spirits will ever affect the mind, and causes affecting the mind will ever operate on the animal spirits.² There seems, moreover, to be commonly a kind of flux and reflux, an ebbing and flowing of the animal spirits, an exhaustion and repletion, not actually alternate regular or periodical, but ever going on, and produced or influenced probably by opposite causes, so that neither the body nor the mind are often for long together in the same condition.

The ebb and flow, depression and exaltation of the animal spirits, are dependent upon and regulated by various causes, some of them internal, others external. I. Of the internal causes, some are, 1, corporeal; others, 2, fluid or gaseous; others, 3, mental. 1. Of the corporeal causes are those that ensue from the clogging up of the vessels of the frame, by means of which the free and elastic flow of the animal spirits is impeded, such as indigestion, cold, or any injury to the material frame which has this result. 2. The fluid or gaseous causes are those whereby the animal fluids or gases themselves are affected, such as impurity or impoverishment of the blood, or the loss or decrease of it. 3. Mental causes are such as distress and grief, by whatever circumstances occasioned, which perturb the mind, as loss of friends, deprivation of property, or any apprehension of evil. II. External causes are such as are independent of our frames or our minds, but which nevertheless

begotten of the thinnest and most sincere parts of the blood;" or, according to others, "a substance very thin and small, made up of air and the vapour of our blood, being the first and nearest instrument of the soul in undergoing its functions."—*Of the Heart*, p. 8.

² *Des Cartes* says that the animal spirits, which are corporeal, are the immediate cause of motions of the body.—*Passions of the Mind*.

Willis asserts that the brain and cerebel, are the two roots of the lucid part of the soul, or rather the fountains of the primary spirits, are placed in the top itself of the body, into which the animal spirits are distilled from the blood.—*Souls of Brutes, Parts of the Soul*, c. iv. p. 23.

directly affect the former, such as impurity or thinness of the air. Indeed, the lighter and more rarefied is the atmosphere, the heavier do the animal spirits appear, which seem as it were, to float in them; consequently the denser the medium the easier do they rise. But rarefied and debased atmosphere depresses the animal spirits mainly by depriving the material frame and vital fluids and gases of vigorous nutriment.

The excitement of strong emotions and passions, especially those which are mental, such as anxiety, apprehension, anger, and the like, and even excessive robust-joy accompanied with laughter, causes the animal spirits to burn up and consume away, and in time to become exhausted. Their repletion is accomplished by cessation from this excitement, which gradually revives the spirits as they distil from the other fluids, and such parts of the body as are adapted to yield them; as also by certain substances being absorbed into the frame, such as those containing alcohol, which are calculated at once to restore the animal spirits by the invigoration which they infuse both into the material frame and those vital fluids whence the animal spirits are themselves supplied.

It is nevertheless to be observed that the depression of the animal spirits does not in every case necessarily at once occasion the existence of grief or sorrow; nor does grief or sorrow necessarily produce the depression of the animal spirits. The only certain result as regards the two events, is, that either state predisposes the mind for the other, by putting the material frame into that condition in which it is existent when the other is called forth. Depression of the spirits consequently prepares the mind for grief, but does not actually produce or occasion it. It is possible, indeed, that in the midst of great depression of the animal spirits, the soul may be in a state of joy, when the condition of circumstances by which it is surrounded tends directly and powerfully to excite this emotion.

The mode in which certain impressions, being those mainly connected with sensations, are conveyed both to the soul and the body, and from one to the other, through the medium of the animal spirits, affords a vivid illustration and a positive proof of the manner in which the two may be united and reciprocally act upon each other.

The existence of the ebb and flow of the animal spirits is equally observable in the animal creation as in man, and in birds and insects as well as beasts.

That liquid or gaseous substance termed by certain of the older writers on this subject the nervous fluid, but which through the aid of modern discovery seems more correctly to be designated nervous ether,³ appears, like the animal spirits,

³ See *Theory of a Nervous Ether*, by Dr. Richardson, F.R.S., *Popular Science Review*, No. 41, p. 379. This able and ingenious writer, however,

to be a very rare and subtle vapour, or gas, or fluid, which flows through the frame, and is conveyed by connecting structures called the nerves. It is probably, however, more ethereal or refined than the animal spirits, and far more vivid in its movements, which are not regulated, as in the case of the animal spirits, by the state of the blood⁴ or of the air, but entirely by the impulses of the soul. This liquid or gaseous substance, by whatever name it may be termed, is dependent, both for its quantity and its quality, on the general condition of the material frame, the debilitation or disease of which tends directly to deteriorate it. It is in its nature probably allied to electricity, and is consequently much affected by the electric state of the body and of the air, and of various matters external to the material frame.

The nervous fluid has been supposed to be the substance which not only serves as the impelling principle to the muscles from the senses and the will, but as the actual medium of communication between the soul and the body.⁵ Upon the nervous fluid it has been conjectured that the soul acts, and that this nervous fluid it is which operates upon the body and its organs.⁶

That the nervous ether or fluid is in its nature allied to electricity, is not only to be inferred from the similarity of its opera-

remarks that "in nervous structure there is unquestionably a true nervous fluid, as our predecessors taught. The precise chemical composition of this fluid is not yet well known, the physical characters of it have been little studied."—*Theory of a Nervous Ether*, p. 383.

⁴ *Dr. Richardson* considers that "the source of this refined matter within the body is the blood. I look upon it as a vapour distilled from the blood; as being persistently formed so long as the blood circulates at the natural temperature; and as being diffused into the nervous matter, to which it gives quality for every function performed by the nervous organization."—*Ibid.* p. 383.

⁵ According to *Buffon*, the nerves are the immediate organs of the mind, but which diversify from a difference in disposition.—*Natural History—Senses*.

⁶ *Dr. Richardson*, however, considers—in the essay already referred to—that "the veritable fluid of nervous matter is not of itself sufficient to act as the subtle medium that connects the outer with the inner universe of man and animal. I think—and this is the modification I suggest of the older theory—there must be another form of matter present during life; a matter which exists in the condition of vapour or gas; which pervades the whole nervous organism; surrounds, as an enveloping atmosphere, each molecule of nervous structure; and is the medium of all motion communicated to or from the nervous centres."—*Theory of a Nervous Ether*, p. 383.

He further observes, that "our experience assures us that between ourselves and the outer world there is, while we live, an intercommunicating bond which connects us with the outer world; which is apart from the gross visible substances we call flesh, bone, brain, blood; which in some way, nevertheless, is connected with both heart and brain and organs of sense."—*Ibid.*

tions, but we find that in certain animals, as in the torpedo and the electric eel, a special electrical apparatus is obvious. And if some animals possess nervous ether or fluid, may it not be inferred that all animals do so, although differing extensively as to the degree in which they are endowed with it, and as to the mode and extent in which it is exhibited by them? It has also been proved by experiment that currents of electricity exist in the muscles of living animals, and that there is an electric discharge in all the muscles the moment they are acted on by the will. Electricity will, moreover, produce in an animal body operations corresponding with those excited by the nervous ether or fluid. Phosphorus has by some persons been supposed to be an important element in such of the vital fluid and gaseous substances as are connected with our intellectual operations. It is certain nevertheless that electric fluid, however allied to or resembling the nervous ether or fluid it may be, is totally distinct from it, or from the principle of life; inasmuch as many substances not only inanimate and destitute of all nervous excitability or power, but which appear as opposite as possible to animate substances or frames, being both motionless and inorganic, such as rocks and vapours, are sometimes extensively endowed, and indeed saturated, with electric fluid.⁷

It may be inferred that there is this great difference between the use and agency of the animal spirits and the nervous ether or fluid, that the former serve mainly to give life and vigour and elasticity to the frame, while the latter constitutes the principal medium of communication between various parts of it. Both their nature and their use are therefore totally distinct.⁸

There are three several modes in which the vital fluids and gases exist in and circulate through the frame—1. They flow in the vessels provided for them, as the blood in the veins, the nervous ether or fluid in the nerves. 2. They exist and circulate in other fluids, as the animal spirits in the blood. 3. They pervade the whole frame, as is the case with thermal fluid or heat.

⁷ *Dr. Richardson* says, "I think I may venture, to some extent, to define the required physical properties of a nervous ether. We may consider it as a gas or vapour, and as having in its elementary constitution carbon, hydrogen, and possibly nitrogen. I suspect it is condensable under cold, movable under pressure, diffusible by heat, insoluble in the blood, and holding, at the natural temperature of the body a tension requisite for natural functions."—*Theory of a Nervous Ether*, p. 384.

⁸ In the opinion of *Dr. Richardson*, "the nervous ether is not, according to my ideal of it, in itself active, or an excitant of animal motion in the sense of a force; but it is essential as supplying the conditions by which the motion is rendered possible. It is the conductor, I presume, of all vibrations of heat, of light, of sound, of electrical action, of mechanical friction. It holds the nervous system throughout in perfect tension during perfect states of life."—*Ibid.* p. 385.

In man and other animals,⁹ the circulation of the various fluids and gases within his frame, appears to be stimulated and propelled, or otherwise promoted, in part by external causes operating on those fluids and gases in common with all other substances of the same nature; in part by the changes produced by corresponding external causes affecting the condition of the organs or vessels through which those fluids and gases are transmitted; and in part by certain peculiar causes and conditions connected with the internal state of the being in which they exist.

In vegetables, as also in bodies destitute of life, where these stimulating causes may be presumed to act with less force, the mutations of temperature, to which from their being entirely stationary they are especially exposed—experiencing the changes not only from summer to winter, but from day to night, from sunshine to shade, and from drought to rain, as well as the constant variations of the atmosphere in regard to its weight, dryness, solidity, density, and other qualities; and which both directly excite the operation of these fluids and gases, and also indirectly produce this result by the alterations they cause in the substance of the stems through which they flow—all conduce to promote this circulation of their fluids and gases. A question might arise whether during the ordinary affection of any person, either through a change in the animal spirits or the nervous ether or fluid, it is the fluid itself that undergoes alteration, or the material organs through which these fluids and gases circulate that are changed; whether this happens through disease in themselves, or through some variation in the elements surrounding them. It appears probable, on the whole, that both these causes are more or less in operation in the cases alluded to; and that while in some instances the affection of the organs is what immediately influences the fluids and gases which circulate through them, in other cases the fluids and gases themselves are actually affected, either by dilation or condensation, excitement or lulling, invigoration or attenuation. So in certain cases of mental agitation, it is the soul itself which is directly excited; in others, the material organs of the body through which the soul operates, are immediately acted upon.

The nervous ether or fluid may be exhausted by different causes, as by excessive mental study on the one hand, or by over-exertion of a physical kind on the other, in either of which cases the material frame suffers by depression and debilitation, and the nervous system becomes enfeebled and deranged. It is

⁹ In the essay referred to, *Dr. Richardson* states: "In the theory, therefore, I offer, the nervous ether is an animal product. In different classes of animals it may differ in physical quality, so as to be adapted to the special wants of the animal; but essentially it plays one part in all animals, and is produced, in all, in the same way."—*Theory of a Nervous Ether*, p. 384.

probable, moreover, that the nervous ether or fluid, like the other vital fluids, may be disordered either by itself becoming in some way deteriorated in quality, or its matter decreased, or, it may be, increased, to too great an extent; or by a derangement, in any one of the various modes to which they are liable, of the organs through which it is transmitted, or which are made use of by it, or connected with its operation.¹

That which affects the animal spirits does not, however, always or necessarily affect also the nervous ether or fluid. Thus, a great depression or exaltation of the animal spirits may leave the nervous ether or fluid unaffected; and the nervous ether or fluid may be highly excited, while the animal spirits remain in the same state. Hence we cannot suppose the nervous ether or fluid to be derived from, or dependent upon, the animal spirits; but it may be inferred to be either the actual product of the substance of the material frame, independent of the blood, or else to be more or less dependent upon the general condition of such frame. Probably, however, both the nervous ether or fluid and the animal spirits have a mutual and reciprocal influence upon one another, so that the affection in any way of the one is at once communicated to the other, either through an alteration as to the density or other quality of the substance itself, or in those of the vessels or organs through which it flows.

Some animals, however, as is the case with all plants, appear to be wholly destitute of nervous ether or fluid, and of a system to maintain and circulate it. In different creatures, and indeed in different men, and probably in the same person at different periods, this substance seems to vary as to its quantity, and possibly also as regards its quality.

Disorder of the vital fluids and gases, by whatever means caused, will occasion as much injury and disarrangement to the operations of the whole system, as will be produced by actual disorder in the organization of the material frame. Indeed, bodily health, and that of the mind as well, depend to a large extent, possibly as much, upon the proper tone and condition of the vital fluids and gases, as on the state of the material frame itself, while they are in turn largely affected by the condition both of the body and of the soul. Thus, either excess or deficiency in the animal spirits, is alike productive of insanity. In the one case fury, in the other melancholy, is the result. Disorder of the nervous ether or fluid produces also mental disease. Moreover, one of the most marked characteristics of

¹ According to *Dr. Richardson*, "the nervous ether may be poisoned; it may, I mean, have diffused through it, by simple gaseous diffusion, other gases or vapours derived from without; it may derive from within products of substances swallowed and ingested, or gases of decomposition produced, during disease, in the body itself."—*Theory of a Nervous Ether*, p. 387.

madness is the alternate depression and over-exuberance of the animal spirits. This is caused, perhaps, mainly by the impure condition of the blood, and probably of the vessels of the body also, by means of which the spirits are at one time clogged up and prevented from flowing freely, and at another time rush in ungovernable gusts and torrents through their channels, carrying ruin and destruction all around. In fact, the irregular flow of the animal spirits or of the nervous ether or fluid, either as regards the degree of celerity with which it is transmitted, or the too great accumulation of it in one portion of the frame, and the consequent too limited supply of it in another, has been by some considered to be the principal, if not the sole producing cause of insanity. This irregularity in the flow of those substances may, as already mentioned, be occasioned in part by the state of the fluid or gas itself, as being too vigorous or too feeble, too volatile or too dull, which alone (as is also the case with other diseases of it of a different nature) may be an immediate cause of the disease in question; and in part by the condition of the material organs or vessels through which it is transmitted.

The originating and producing causes of this disturbance or irregularity may, however, be external as well as internal: and may be occasioned by a shock to, or mutilation of, or other injury to the material frame, or the organs of the nerves or spirits; or by the deterioration of the substance from which the vital fluid or gas, of whatever kind, is obtained.

Laughter, which is a temporary disorder, or irregularity, or excitement of the frame, is probably caused by the rapid and violent expansion and outburst of the animal spirits, owing to a sudden tide and overflow of them, and is not unfrequently followed by corresponding depression. Crying is also produced by the vehement efflux of the animal spirits, occasioned by the agitation or depression of the frame, in which case they are expelled, not on account of any overflow, but from the intrusion into their sphere of a vapour or fluid of another and a grosser kind, to which they are compelled to give way. The convulsion of the frame which their efflux in both cases effects, is owing to the violent nature of that efflux, and the resistance which is opposed to it;—like water poured out of a narrow-necked vessel, the course of which is checked by the influx of the air.

5. *Endowment with Spirit.*

Essential as is the supply to a material frame which is to be the vehicle of an animated being, of the requisite substance, form, organization, and fluids, already described; yet such a frame so constituted would be still but an inanimate inert

mass, were it not for the endowment with and annexation to it of that which is the real and essential part of our existence, the spirit which animates or gives vitality to this frame.² The precise mode in which this mysterious being is infused into or annexed to the material frame, it is of course utterly beyond our power to discover or to unravel. But although we cannot perceive the process, we have evidence, absolute and conclusive, of the fact, from the result, which is palpable.

As a material frame cannot act even in the simplest manner without form and organization, so neither can both form and organization constitute an animated active and intelligent being, unless spirit be superadded to such a frame. A corpse has substance and form, and organization, and fluids, and gases, as complete in all respects as those of a living man. It lacks only the spirit by which the frame can be animated.

In order therefore to the complete constitution of an animated being, it is essential that the frame in question be endowed with a spirit, of the quality we shall consider in certain of the following sections,³ as also the mode and nature of that endowment.⁴ All beings indeed which possess any principle whatever of vitality—in the opinion of certain persons even vegetables—are supplied with spirit of some kind, which constitutes the principle of life and growth, and without which they are lifeless, and incapable of performing any functions, and deprived of which they at once die and decay. Without this spirit the frame is no longer a living being, but a mere senseless; motionless mass.

In what mysterious manner matter and spirit can be not only conjoined, but act in union together, is a topic which has long perplexed the subtlest of metaphysicians, and the most acute and profound of mental philosophers. But the possibility of the fact is proved by its actual occurrence. We know for

² A very different theory, however, is maintained by some writers of eminence. Thus we are told that “it is becoming evident that living structures result from the action of a multitude of natural forces in combination.”—*Vestiges of the Natural History of Creation*, 9th edit. p. 103.

According to *Mr. Lewes*, life is known only in dependence on substance, and it vanishes with the disintegration of the substance.—*History of Philosophy*.

Sir Wm. Lawrence also states that “life, or the assemblage of all the functions, is immediately dependent on organization.”—*Lectures on Comparative Anatomy, Lect. I.* He does not, however, assert that life consists in, or is the result of, but merely that it is dependent on, organization.

Mr. Abernethy, on the other hand, remarks that “we find life connected with a vast variety of organization, yet exercising the same functions in each—a circumstance from which we may, I think, naturally conclude that life does not depend on organization.”—*Inquiry into Hunter's Theory of Life*, p. 16.

Hunter's opinion on this subject has already been cited.—*Vide ante*, p. 32, *note*.

³ *Vide post*, ss. iv., v., vi.

⁴ *Vide post*, s. vii.

certain that matter is moved and operated upon in various ways; and we know also that it does not and cannot act on or of itself, but that spirit it is, and that alone, which acts upon it; also that the spirit which does so is not independent of it, but is in some way or other united to it, and is moreover constant and regular in its action and influence; and that when this action and influence cease, the material frame itself ceases to act and to be animated.

As regards the precise mode in which the spirit is united to the material frame,—whether through the medium of certain fluids or gases of extreme subtlety, which consist of a substance intermediate between gross matter and spiritual substance or essence, partaking possibly of some of the special qualities of both; and whether through material organs so refined and so delicately sensitive as to be adapted to receive the impressions or vibrations of spirit, in a manner analogous to that in which the senses receive the finest impressions of light and air,—we are utterly deficient in satisfactory data from which to draw any certain conclusions. Not impossibly or improbably, however, in some mysterious mode, analogous to that in which the body, or certain of its organs, serve as a medium of communication between the soul and the external material world, the fluid and gaseous vital substances, or certain of them, with which the material frame of man is provided, serve as a medium of communication between the soul and the body.

III. VITALITY OF DIFFERENT KINDS.

HAVING so far discussed and disposed of the important and interesting questions of the origination and production of animated beings generally, and the constitution of such beings, including both their material and spiritual endowments, and the connexion existing between the two opposite natures or existences combined in these beings; we come next to the consideration of the different kinds of vitality with which beings of various orders may be endowed, the several modes in which these distinct properties are manifested, and the main qualities and characteristics appertaining to each of them.

Vitality may be distinguished into four different kinds, being those of vegetation, life or animation, sensibility, and intelligence.⁵ Each of these principles or species of vitality possesses, moreover, its particular leading characteristics or endowments, whereof nutrition appears to be that of vegetation, action that

⁵ The three different parts of the soul into which certain of the ancient philosophers divided it, appear to me closely to correspond with what I have here classified as vegetation, life, and intelligence.

of life, perception of external objects that of sensibility, and rationality that of intelligence.

Frames endowed with the principle of vegetation only, such as trees and plants, are in general incapable of action or motion. Certain frames, however, which are endowed with the principle of life are as incapable of locomotion, if not of action, as are vegetables. Such is the fact with the sea-anemone and with several shell-fish, although they are gifted not only with life, but with highly sensitive, and also extensive instinctive powers. In the case, nevertheless, of the stationary inhabitants of the ocean, the constant motion of the elements around them in which they are habited, which causes motion too in many other objects, extensively compensates for the want of locomotion in the animal itself; and supplies much of what such a power might enable it to acquire.⁶

Those frames which are endowed with the principle of vegetation, but are destitute of that of life, such as plants, are supplied with a form and an organization suitable to their endowments, and also with fluids and gases necessary and proper for their nutriment, sustenance, and growth; and it may be inferred that what the brain is to the body of a man or an animal, the root is to the trunk of a tree or plant. It is the centre of vegetation, wherein this principle of limited or qualified or imperfect life resides, and whence its influence springs and is exerted. So also the pores of the plant correspond with the veins of the animal, its leaves with its sensorial organs, and its bark with its skin.

There are, as already observed, several distinct and independent stages or phases of existence, which are passed through, not only by plants, but by animals, and also man.⁷ There is first the seminal condition, when the being in question exists in the seed or egg, at which time it is hardly endowed with even the principle of vegetation, and form and organization are but very imperfectly developed. The second stage of being in the case of animals and man is that of foetus, when they are endowed with the principle of vegetation alone of all the species of vitality, and with that only very slenderly and feebly, although at this period vegetation is the sole vital principle which they do possess. They also display a certain degree of form and organization. In the case of plants, this state, analogous to that of the foetus condition in animals, is represented by the young and undeveloped shoots which plants make when first emerging from the soil, before their leaves are spread, or their branches are put forth. The third stage is that when the plant, arriving at maturity, exhibits per-

⁶ *Harvey* observes that in winter some creatures which have no blood, such as the snail, have nothing which beats, but do rather seem to be like plants, which for that cause are called plant-animals.—*Anatomical Exercises*, p. 29.

⁷ *Vide ante*, s. ii. art. 2, p. 31.

fectly its form and its organization, and acquires the principle of vegetation to its full extent and in complete vigour. In the case of animals and man, the condition analogous to this last is that of the newly-born offspring, which possesses, however, the principle of life. The next stage in the case of an animated being, is that when it is so far matured that its form and organization are entirely developed, and it is endowed with the principles of sensibility and intelligence, according to the nature of such particular being.

Certain insects appear to pass through four distinct stages, and to exhibit four distinct phases of existence. First, the seminal state, when they live, like many other animals, particularly birds, in the egg. Second, the vernal state, when they exist as grubs or worms of some kind or other. Third, the chrysalis state, when they seem to relapse into the oval or egg condition. And the fourth, the winged state, when they emerge from the chrysalis, and become flies or winged insects. In these varying creatures, and during each of these conditions, vitality of some kind is to be traced, although it probably differs in its nature correspondingly with these different stages or phases of existence: being vegetation, although imperfect, in the first and third; and advancing into life, and into sensibility also, in the second and fourth.

1. *Vegetation.*

Vegetation, life, sensibility, and intelligence, are each of them entirely distinct and independent principles, and do not necessarily by any means exist together. Plants, and apparently some animals of the lowest kind, are endowed with the first of these principles only; and in certain cases we may observe animals, and also man, possessing that alone, as in the foetus of both man and animals. When persons are attacked by apoplexy or epilepsy, and all traces of reason or instinct have for a time entirely departed, the principle of vegetation will nevertheless continue to exist and to exhibit itself; the heart and the pulse will throb, the limbs move, and the body on being lacerated will evince signs of feeling, as though the reason were perfect, and all the ordinary functions of the frame will still be carried on.⁸

There are, however, as already observed, two main and leading distinct and independent principles which are attached to various material frames, or with which these frames are capable of being endowed, and which are respectively termed vegetation and life. To these may be added the higher principles of sensibility and of intelligence, whether the latter amounts to

⁸ *Buffon* remarks that the body may sometimes exist in a state of vegetation only, and yet return to vitality and animation.—*Natural History.*

rationality, with which man alone is gifted, or whether it be limited to instinctive endowment only, such as animals possess.

Some philosophers appear to have supposed the principle of vitality (including herein both life and vegetation) to be a kind of flame of a very refined and subtle species. Its resemblance to and community of qualities with that substance, may perhaps have contributed to strengthen the opinion; as also the fact of living bodies, not only of man, but of all warm-blooded animals, possessing the quality of heat, which continues as long as life remains. In the case, moreover, both of flame and life, the same atmosphere is requisite to support them. Both are dependent on a material frame for their subsistence, and which frame in the case of each gradually consumes away. Ether has also been thought to be a constituent in the constitution of life, or rather it has been imagined that life is in its nature allied to ether. Others have asserted life to consist of, or to be formed out of electrical ether.

It is nevertheless observable that those beings which possess vegetation only, have it in greater perfection, as regards the development and power of retaining this principle, than those which are endowed with life also. Thus, plants in general grow with greater rapidity, produce their offspring more numerously, and retain vegetation more vigorously than do animals. In many cases, indeed, vegetation is more tenacious in plants than life is in animals, because each part of each plant forming a distinct and complete organization, may be destroyed without injury to the other parts. In most animal frames, on the contrary, a destruction of any member affects the whole organization, no portion of which, as in vegetables, is independent of the other. Certain of the polypi species, however, resemble vegetables in this respect.

Some animals, as in the case of toads, have retained vitality under extraordinary circumstances, as when pent up for many years in the cleft of a rock, without air, or room to move. Plants could hardly have existed in such a condition as this except in a seminary state, which is one of the very lowest kinds of vegetation, and seems to form a connecting link between that principle and the entire destitution of all vitality.

When animals have fallen into a condition of torpidity, they appear indeed to be endowed temporarily with the principle of vegetation only, and that of the order which I have denominated the seminary, and which is undoubtedly the best fitted for long continuance, because the material frame suffers the least by evaporation, or wear and tear, or waste of any kind, when in that state. But for this principle of waste¹ inseparable from their very condition and nature, organized bodies endowed with

¹ *Vide post*, s. ix. arts. 1, 2.

vitality might continue to exist as long as those of any other kind.

2. *Life.*

The principle of vitality which next demands our consideration after that of vegetation, is what is ordinarily termed life, and is the one with which animated beings in general are endowed.

There are three distinct and independent modes by which a knowledge of different subjects is attempted to be communicated, each more or less peculiarly applicable to the particular topic sought to be illustrated. The first of these, which is the most satisfactory, although the least seldom resorted to, inasmuch as the recourse to it implies a precision and an extent of information not often possessed in regard to abstruse philosophical matters, is by direct definition, or pointing out clearly and explicitly what the subject really is. The second mode consists in describing the operation and application of the principle in question, by demonstrating, not what it is, but what it does. The third is effected through suggesting inferences as to its real being, by referring to some subject or object which is its direct counterpart or opposite, as by showing what it is not, and what it does not do. The two last of these modes embrace nearly all that we can accomplish in the specification of life. We are unable fully and accurately to define or describe it; but we can point out its operation and results, and we can infer many things as to its nature from an examination of its counterpart or opposite—death.²

As regards life, the whole of what we can effect towards accomplishing an accurate definition of it,³ is to assert that

² Thus *Bechet* defines life to be “the sum of all the functions by which death is resisted.”

³ *Hunter* observed that the principle of life is conceived of with more difficulty than any other in nature, which arises from its being more complex in its effects than any other.—*On the Vital Principle, Works*, vol. i. In another work *Hunter* also acknowledges that “life is a property we do not understand; we can only see the necessary steps leading towards it.”—*Principles of the Blood*, vol. viii. p. 117.

Coleridge, however, tells us that he has no doubt the true idea of life existed in the mind of John Hunter, but that circumstances prevented him from unfolding it in clear terms.—*Theory of Life*.

According to *Coleridge* himself, the constituent forces of life in the human living body are reproduction, irritability, and sensibility. But life itself is neither of these separately, but the copula of all three.—*Theory of Life*, p. 93.

Sir W. Lawrence defines life to be “merely the active state of the animal structure.”—*Lectures on Comparative Anatomy*, s. ii.

Abernethy remarks that “if the vital principle of Mr. Hunter be not electricity, at least we have reason to believe it is of a similar nature, and

it is a principle with which certain organized frames are endowed; that it is in itself independent and active, invisible, and intangible, if not absolutely immaterial, resembling electricity in certain of its qualities and properties, although differing from it in others. With respect to the result and operation of life, it is termed that principle which gives activity to organized frames, promotes their growth, and prevents their decay. It is, moreover, the absolute context or counterpart to death, which at once ensues in any animated body when life departs. Organized frames alone can be endowed with life, or even vegetation.⁴

However unable we may be to define or determine what the principle of life actually is, respecting which the most sagacious and the most learned have differed, and to arrive at which from the earliest days of civilization philosophers have made strenuous efforts; yet it appears obvious that it is an independent and real principle in itself, and something quite beyond and superior to vegetation, and that it cannot possibly be the result or product of mere organization only, however exquisitely contrived or even perfect. It is also, although a spiritual, if not actually and essentially an immaterial principle, one which may be annexed to a material frame, and may act upon and animate it, conferring qualities with which such frame without this principle could not possibly be supplied.

Life appears also, as far as we can judge, to be independent of the spiritual being or soul, as, in the first place, the possession of intelligence, which is conferred by the soul, does not

has the power of regulating electrical operations."—*Inquiry into Hunter's Theory of Life*, p. 88.

Sir Humphry Davy observed that "in physics and in chemistry, the science of dead matter, we possess many facts and a few principles or laws; but whenever the functions of life are considered, though the facts are numerous, yet there is, as yet, scarcely any approach to general laws, and we must usually end where we begin, by confessing our entire ignorance."—*Consolations in Travel: The Protæus, or Immortality*, p. 182.

⁴ Hunter, however, attempted a definition of life by reference to its results. He termed it the principle of self-preservation, preventing matter from falling into dissolution, as also the principle of action.—*On the Vital Principle*, Works, vol. i.

According to another eminent physiologist, "life is the word which we assign to the capacity of an organized being to perform its functions."—*Smee on Instinct and Reason*, p. 71. He also asserts that "life is the result of mechanism."—*Ib.*, p. 17.

Sir Humphry Davy observed that it is probable that some subtle matter is derived from the atmosphere connected with the functions of life, but that it ought not to be supposed to be the cause of vitality.—*Consolations in Travel*, p. 193.

Mr. Herbert Spencer, who in this instance appears to be more successful in pointing out the difficulties of effecting a complete and satisfactory definition of life, than in making one himself, defines life to be "the definite combination of heterogeneous changes, both simultaneous and successive."—*Principles of Biology*, p. 70. But is not this rather a definition of the result of life than of its essence—of what life is?

necessarily or in each case accompany the possession of life; and, in the next place, intelligence itself sometimes departs, or is wholly wanting, where life remains. Endowment with spirit appears, however, to combine both life and soul, although the principle of life which spirit confers may be separable from that of intelligence.

According to some writers, life is like one of those chemical compounds which only become visible, although not then more really existent than before, on coming in contact with some particular substance or body, or on being brought into an atmosphere of a certain kind. Thus, life on its union with the body is supposed to become active and to evince its existence, although before it was both inert and imperceptible.

We may indeed reasonably infer that it is very possible for life, when it is annexed to various bodies or beings, to differ much as regards its activity, power, or capacity, without differing at all as regards its essence, although appearing to differ extensively in the latter respect also, owing to its difference as regards the former. Variety in condition or quality causes many substances to differ apparently in essence also, although the essence remains the same, while the quality is ever changing, as is also the appearance of change in essence as well. Consequently life, although in all cases the same in essence, may differ widely in appearance, owing to two circumstances—1. According to the constitution and structure of the material frame or body which is to be animated by this principle, and to which it is to be annexed, or with which it is to be endowed. 2. According to the relative or proportionate quantity of life which is annexed to or infused into that body or frame.

The mode or process pursued in the development of life out of vegetation, is best evinced in the case of the foetus and the new-born animal, already referred to. Vegetation is the only vital principle which the foetus possesses, and to which the animal lately brought into the world can lay claim. But at once and forthwith on its birth, some feeble glimmering of life is exhibited, which soon increases, and is speedily developed; and thus life grows as it were out of vegetation, the latter gradually decreasing, and the former to a certain extent expanding, until at length vegetation is completely absorbed in, or overshadowed by life. In this respect life is in many respects to reason what vegetation is to instinct; and the operations of the two principles in each case in regard to the other, are to a large extent closely analogous.

Life seems to be in some way or other existent in, or derived from the blood, and its continuance is consequently dependent upon the supply of that fluid, so that whenever the latter fails the former departs. At the same time, life very often exhales while the blood remains apparently unchanged. The blood,

therefore, cannot be the actual principle of life, although it may be the substratum in which it resides, or the ingredient from which vitality springs, or by which it is maintained, or the stimulus by which it is supported. Hence disease or deterioration of the blood materially affects life, as an extensive loss of blood extinguishes life. On the other hand, many animals, such as lobsters and certain insects, which are abundantly endowed with life, have no blood. Life therefore must be independent of blood, although in our frames it may reside in that fluid. Possibly, however, other fluids, or certain gases, may be equally adapted for its maintenance.

On the whole, therefore, we can only conclude life to be a kind of independent peculiar principle of itself, which, though in some respects resembling flame, is very different from it; which, though allied to ether, is not ether; although similar to electricity, varies widely from it; and though it may reside in the blood, is not the blood itself. Like fire in the flame of a lamp,⁵ it may be confined to a particular body, from which, like electricity discharged from a substance lately imbued with it, certain causes may occasion it to escape, and when once discharged it may be for ever irreclaimable. Possibly life may consist in electricity reduced to fixity, as fire, which in the lightning is in vivid motion, may be, as it were, tamed and confined in a furnace. At all events, life is an independent, active principle by itself, wholly distinct from soul, spirit, and mind, on the one hand, and from the material frame on the other. Neither is it the result of either, but it exists separate from both. It is known to us rather by its operations than as regards its essence. Through endowment with it it is that all animals move, and feel, and possess heat, and circulate their fluids. It is, at all events, a real principle, liquid probably in quality, and substantial in essence. Speculation such as this, however unsatisfactory, is the utmost that we can effect on such a subject.

It is nevertheless obvious that life is something more than either mere organization or the result of organization, inasmuch, as already remarked, a dead body is as perfectly organized as a living one. Hence life must consist in some independent principle by itself. It can, however, only act upon matter which is organized in such a manner as to adapt it for such operation.

⁵ According to *Willis*, the life of the blood, or that part of the soul growing therein, is a certain kind of flame, and which he compared to a burning candle or lamp.—*Works, Accension of the Blood*, p. 26.

Willis also remarked that fire and life die, or are extinguished alike many ways.—*Ibid*.

Buffon observed that animals seem to participate in the qualities of flame, that their internal heat is a kind of fire, and that often fire-animals are the greatest destroyers, assimilating and converting into their own substance every matter which may serve them for blood.—*Nat. Hist., Reproduction*.

The material frame of each animated being is an organized structure proper and necessary for the subsistence of life, which requires some aptly-formed body in which to reside. But this does not prove those frames to be themselves the originators or cause of life. The most exquisite organic structures, fitted with vessels and fibres of the utmost variety and susceptibility, may indeed exist, as in the body of a man deprived of life; and yet where the principle of life is wanting, those frames will be as dead as though they consisted of wood or stone. On the other hand, in many bodies, the organization of which is apparently rude and imperfect, such as we see in oysters and polypi, if the principle of life be implanted in them, they are as completely animated and as vigorous, although not so active or so sensitive, as is man himself. Life is consequently no more created, or brought into existence by, or the result of, any organization or other disposal of matter, than a man is made by, or the result of, the clothes which he wears, or the dwelling which he inhabits.

But although life is not constituted by organization, and although organization may exist without life—which proves that of itself it does not constitute life—yet life never does and never can exist without organization. And it may be further asserted, that in proportion as organization is refined and complete in each frame, is vitality active and energetic. Indeed, though life may reside in or be annexed to certain bodies only, this does not prove it to be the result of the structure of those bodies, any more than a flame being attached to the wick of a lamp, proves fire to be the result of the structure of that wick.

Nor does it appear requisite that organized frames should be of any particular size, shape, or texture, in order to their possessing the principle of life. Indeed, we find that some of the most minute creatures, such as certain insects and polypi, are in reality far more vigorous, and are beyond comparison more tenacious of life than are the largest animals known to us, the elephant and the whale.

It seems probable that the heart is the seat or centre of vitality, as the brain is of the soul. Although there are many injuries to the heart which may not produce death, yet any interference with its proper operation will at once do so. The heart moreover is the main propeller of the blood, and the chief agent in the abstraction from it of the animal spirits. When life departs, the heart is the first of all the material organs to give token of this event. The heart, too, appears to be extensively operated on or affected when the animal feelings are excited, and which are nearly connected with the vital principle.

The characteristic and distinctive peculiarities of vitality, as exhibited by the results which it produces, are its imparting to the frame in which it resides the power of continuance free

from decay, and also that of growth; and the faculty that it confers on such frame of continually absorbing from other substances of great variety, different matter or particles for its nutriment. Accordingly, as vitality can only be manifested, so it can only exist in organized frames.

A germ is an imperfectly organized frame endowed with vitality of the lowest order, the future being existing here only in an incipient state, which is intended to be merely transitory, and to be hereafter gradually and fully developed. While in this condition such a frame is in some cases, as also in that of a foetus, rather a member of the parent frame than an independent frame of itself.

The capacity of growth up to a certain period of its existence, appears to be a consequence of vitality in every organized being, and is annexed to the principle of vegetation as fully as to that of life. At some periods of their growth animals nearly resemble, and in certain cases even fall below the condition of vegetables. A foetus is not much more animate than a tree, and an egg is considerably less so. Although vitality is so different in animals and vegetables, yet growth in each is much alike. The essential distinction between animals and vegetables seems to consist not wholly in their structure and organization, as many animals, such as the polypi, are in this respect closely allied to plants. But what constitutes an animal, and causes it to differ mainly from a plant, is its physical irritability and superiority in sensation by means of its nervous endowments and functions, and its power of action, if not of motion, at will.

The same causes which terminate vitality in animal bodies extinguish it also in vegetable frames. In the case of each, destruction or extensive mutilation of the organization, exposure to excessive heat or excessive cold, or the want of air, will expel whatever principle of vitality it possesses.

3. *Sensibility.*

In addition to and beyond the fact of an organized material frame being endowed with the principles of vegetation and of life, it is necessary, in order to enable it to perform any of the ordinary functions which animated beings are capacitated to discharge, that it possess also the power of being sensible to outward impressions of various kinds, which it exercises through certain material organs termed the senses, the nature and functions of which will be made a distinct subject for consideration in a future part of this treatise.⁶ The senses, however, are but the organs of the principle of

⁶ *Vide post*, book i. c. i.

sensibility, which appears to be annexed to, or to be an endowment of the spiritual or instinctive being, and to be obviously something quite beyond and much higher than that of vegetation, and even of life. Sensibility springs from the endowment of the material frame with an intelligent spirit, in which latter, and not in the material frame, sensibility resides, and by which it is exercised.⁷

The power or endowment termed sensibility, consists therefore in the ability of any being or object to be affected by other beings or objects external to it, in such a manner that sensations are communicated to and experienced by the being or object so operated upon, and by which it is excited, and is impelled to action. A certain degree and amount of organization as well as of vitality are essential for this purpose. In consequence of the excitement in question through sensibility, some of the qualities or properties of the object or being affecting the mind or instinctive being, so work upon it, that it at once perceives their nature, and is forthwith stimulated to some operation in regard to them, and as the result of such communication. An organization specially adapted for its exercise, is therefore essential to the possession and operation of sensibility.

4. *Intellect.*

The principle next demanding our consideration, as that with which animated beings of certain kinds, of the highest order, are endowed, is that of intellect, which is one quite beyond and superior to, as well as independent of, not only vegetation and life, but sensibility also. Intellect may be defined to be the power of exercising intellectual efforts of various kinds of the character described, through the instrumentality of those particular capacities and properties of the soul which are termed the intellectual faculties, the nature and constitution of which will be discussed at large in a separate book of this treatise.⁸ Suffice it therefore now to observe, that intellect is the highest and noblest of the several principles connected with vitality, and which is never conferred on any being which is not endowed with vitality. It consists in the ability of any intelligent being through the particular action exerted by it for this purpose, to take cognizance of the nature of any subject or object, by receiving ideas respecting it, and to exercise itself with regard to those ideas, by either separating or combining them. The capacity to receive ideas, and to apply them in various modes, is consequently that which essentially constitutes intellect, which is a power and an operation that is in itself, and which raises the being exerting it, one step or degree beyond that which sensibility alone confers. Sensi-

⁷ *Vide ante*, p. 156.

⁸ *Vide post*, book iii.

bility supplies the foundation for intellect, and without this foundation intellect cannot subsist. Consequently, although there may be and often is sensibility without intellect, there can be no intellect without sensibility.

Intellect is consequently an endowment more extensive and exalted than sensibility, consisting in the capacity of the being possessing it not only to perceive and be affected by the nature and qualities of substances with which it comes in contact or holds communication; but to exercise various intellectual operations, such as those which are performed through the instrumentality of the mental faculties alone in regard to them, as also with respect to other matters and topics, independent of the excitement of sensation from material objects as the immediate stimulus to such exercise. For the possession and exercise of intellect, soul is essential, intellect being in fact but the active power of the soul. Animals, as well as man, possess sensibility. Man alone possesses intellect.

5. *Distinctive Province of Matter and Spirit.*

No two beings or existences appear to be not only so entirely different from, but so diametrically contrary to each other, as are matter and spirit. And yet there are no two subjects respecting the diversity between which greater perplexity has arisen, or between which there has been more difficulty in pointing out the essential distinction.

At certain points, but very slender barriers separate the two provinces from each other; and notwithstanding the vast ostensible difference in the nature of each, it is often very difficult, if not impossible, to decide what subjects belong to matter, and what are comprehended under the denomination of spirit. Some substances, composed of gross inorganic matter, may no doubt be pointed at as instances of the entire contrast in every respect which matter presents to spirit. But, on the other hand, certain refined intangible and invisible substances, such as some gases, and particles of light, and air, and heat, may be referred to as proofs how nearly allied in their nature and characteristics, spirit and matter occasionally appear to be. The distinctions between the two are nevertheless no doubt decisive distinct and essential, however our feeble capacities may be unable to distinguish or define them, or to point out explicitly in what they consist.⁹

⁹ *Lord Bacon* observes that as the substance of the soul was not extracted out of the mass of heaven and earth by the benediction of a *producat*, but was immediately inspired from God, so it is not subject to the laws of heaven and earth, and that the true knowledge of the nature and state of the soul must therefore come by the same inspiration that gave the substance.—*Advancement of Learning*, book ii. [On

It might indeed at first sight appear to be almost trivial to occupy ourselves in defining the distinctive provinces of two beings not only so entirely different from, but so essentially opposite to each other, as are matter and spirit, inasmuch as this difference may be deemed to be at once both palpable and self-evident. But, as not unfrequently happens, things apparently the most distinct and dissimilar, are in reality united together and of the same nature. From the cold watery cloud proceeds the fiery electric fluid; and from the hard dry rock the fountain of water flows. So in the case of matter and spirit, clearly marked as is undoubtedly the province of each, it is often difficult, if not impossible, to define the exact limits of that province, and to determine where the domain of either commences or terminates. Whether spirit is allied to or partakes of anything belonging to matter, as it undoubtedly acts upon matter, and in various ways, we are unable absolutely to conclude; as also whether there be any substance, or being, or existence, in its nature and properties common to both, which constitutes a common ground or medium of connexion between them—important points worthy of full and deep consideration, and which must therefore be reserved for investigation in a subsequent section.¹ The question is indeed one which it is of the utmost consequence, as regards the attainment of philosophical truth, satisfactorily to determine.

Distinct, therefore, and even opposite in their nature one from another, as matter and spirit are deemed to be, their difference is nevertheless not merely not always perceptible, but the variety between them is occasionally very difficult to trace, if not wholly undiscernible. What seem so far apart, are sometimes discovered to be in reality united and blended together. What appeared most contrary to each other, prove on examination to be the very same. Although in their main and essential qualities spirit and matter are concluded to be so different, in certain of their appearances and operations they are undoubtedly not only allied, but identical. Not impossibly, however, the real difficulty in distinguishing them arises far more from our own inability to perceive the essential and extensive differences which actually may exist, than from any approximation in their inherent qualities. Things, however, exist to us not as they are, but as we perceive them; just as we estimate subjects, not according to their actual intrinsic importance, but in proportion as they affect our own being and welfare.

On the other hand, it is remarked by *Longinus* that “though nature for the most part challenges a sovereign and uncontrollable power, she is not altogether lawless, but delights in a proper regulation.”—*On the Sublime*, s. 2.

¹ *Vide post*, s. v. arts. 2, 3, 4.

Nor can it be laid down that the distinct and legitimate province of matter is in relation only to material subjects, and that of spirit in relation only to those that are spiritual; inasmuch as some of the most powerful influences upon matter are exerted by spirit, and some of the most powerful influences upon spirit by matter. The two, altogether opposite in their nature, appear to be ever attracted towards each other as regards their operations; and the most extensive results originating in or effected in either, are occasioned by the action of one of those very opposite beings upon the other.²

IV. MAN IN RELATION TO BOTH SUBSTANCE AND SPIRIT.

No survey of the nature of man can be considered as complete, which does not include alike his spiritual, as well as his corporeal constitution. Although the latter alone is visible and tangible, the former is in reality his only essential being. In the one he appears, in the other he exists. By the one he claims to be a denizen of earth, by the other he is entitled to be an inheritor of Heaven. Through the one he holds communication with things terrestrial, through the other things celestial are rendered within his comprehension.³

Man indeed has been placed by his Creator on the immediate confines of the two mightiest empires of nature, those of spirit and matter, and seems between these two to form the grand connecting medium; exhibiting in his own constitution all the intelligence and vitality of the one, and the substantial reality, as regards visibility and tangibility, of the other.⁴

Man, however, not only stands on the isthmus, as it were, between mind and matter, but he also appears to occupy an isolated medial position in the great ocean of infinite existence: being far removed from, as vastly inferior to, his Almighty Creator on the one hand; and being also far removed from, as vastly superior to, animal creation on the other.

From this centrality of his position, man possesses many considerable advantages, both mental and moral. Not only has

² "If materialism is incomplete as a mode of explanation of any existence, so is spiritualism just equally insufficient."—*Kant: Critic. of Pure Reason.*

³ The soul seems to have been regarded by *Plato* as a sort of intermediate agent, uniting the body and the intellect, and being the medium of intercourse between them.—*Timæus.*

⁴ *Socrates* held the soul to be pre-existent to the body, endowed with knowledge of internal ideas, which she loses on her union with the body, until awakened by discourse from sensible objects.—*Plat. Phæd.*

According to *Behmen*, the man soweth flesh and blood, and the noble tincture of the soul out of the fire-tincture; the woman spirit out of the tincture of this world.—*Threefold Life of Man*, c. v.

he open before him the view both of the spiritual and of the material world, but the various and opposing influences arising from them both, act together upon his mind. The development of his powers and endowments of each order, is promoted by this means. While as a rational being he partakes of the nature of the higher intelligences, as an animal he has much in common with the animal world, and possesses several physical qualities belonging to animals of very different kinds. Versatility of talent, which is so important an endowment in the human mind, and which has peculiarly distinguished some of the most eminent of our race,—as the possession in full and absolute perfection of every endowment of each kind at once, is the sole prerogative of the Deity,—is analogous to this characteristic of the nature of man.

Man may thus be said to form the connecting link in nature between God and the animal creation. But, however widely man may seem to differ from, and to be superior to, animals when his growth is matured, and all his faculties and powers are fully developed, so that he flatters himself he approaches the Divine Being in His nature and attributes;⁶ yet, on the other hand, if we regard man in all the different stages of his existence through which it is his lot to pass, we shall find that at some periods and in some conditions, he much more resembles, and appears more nearly allied to the animal than to the Divine nature. On his first entrance upon his career, his condition is that of one of the humblest order of animals, from which, however, he gradually progresses until he reaches manhood. In his nature he is indeed essentially a progressive animal; and, beginning from the lowest condition, never ceases to advance both in the maturity and development of his powers. In this respect he differs essentially from animals, who at their first creation are not nearly so helpless as he is, and possess considerably more intelligence. Up to a certain period in the career of each, an animal is therefore of the two in every way the superior, and the more highly endowed. But, on the other hand, an animal advances but little as it grows older; and the progress which it

⁶ *Socrates* thought that the human soul was allied to the Divine being, not by a participation of essence, but by a similarity of nature.—*Men.* c. iv. And that when it passes out of the body it returns to heaven.—*Lelius*, c. iv.

Plato considered the soul to be an emanation from God.

According also to the *Jewish* system of philosophy, the human soul emanated from the Deity, and is an incorporeal substance of the same nature with the Divine intellect. All souls were produced at once, and pre-existed in Adam.—*Enfield's History of Philosophy*, vol. ii. 220.

Sir Matthew Hale, however, asserts that it was not in God's corporeal image that man was created, for the Divine nature is incorporeal and invisible.—*Primitive Organization of Mankind*, s. 4, c. iii. p. 311.

Sir Isaac Newton tells us, "It is the dominion of a spiritual being which constitutes a god. A true, supreme, or imaginary dominion makes a true, supreme, or imaginary god."—*Newt. Princ. Schol. Gen.*

makes is rather with regard to its physical powers, than in the increase of its intelligence or instinctive endowments.

1. *Soul.*

What is ordinarily meant and comprehended by the term soul of man, I should define to be the real essence of the spiritual and rational portion of his being, the actual substratum in which his intellect and faculties reside.⁶

The effort to fathom the most profound and the most abstruse of the mysteries which are involved in the whole economy of the condition of man, may appear vain and presumptuous, and as though no beneficial result could be the fruit of such labours. I attempt not, however, to dive into that which by the Author of all wisdom and all goodness has been wisely and benevolently hidden from us; but simply to carry my researches where revelation has not only not forbidden us to progress, but has both pointed out the way, and in reality done more than all the efforts of philosophy and speculation to afford us certain knowledge. As when in the darkness of the night we look with wondering gaze on the planets which bespangle the sky, and though but dimly seen through the vast and immeasurable expanse, cast their bright beams on our world; we venture to surmise that on a nearer approach to them, were this permitted to us, each of these diminutive stars would discover themselves to be stupendous worlds, and perhaps to be inhabited by intelligent beings:—so when gazing inwardly through the darkness and dimness which now obscures our intellectual vision, we imagine that we can discern in our own wondrous endowments and exalted capacities, some faint reflection at least of the attributes of that glorious Being from Whom alone they derive all their vivacity, and all their power; Who is alike their Creator and the Source from whence they proceed, and their alliance with Whom confers dignity and lustre on their whole nature.⁷

⁶ *Plato* appears to have thought that the soul consisted of two parts, one material, fitted for intercourse with matter, and the other intellectual, capable of spiritual contemplation.—*Philel.* 2. But what *Plato* meant by the material vehicle of the soul is open to much doubt. He moreover divided the soul into three parts, the seat of intelligence, that of passion, and that of appetite.—*Tim.* i. 3.

Aristotle speaks of there being three distinct souls in man, a vegetative, a sensitive, and a rational; the first a principle of growth, the second of sense, and the third of intellectual action. The last only is here meant by the term soul and its operation.

⁷ *Cicero* remarks that he who does not perceive the soul and mind of man to be the work of a Divine providence, seems himself to be destitute of understanding.—*On the Nature of the Gods*, b. ii.

The Manichees asserted, according to Willis, that all souls being taken

Of the exact nature, properties, and quality of the soul,⁸ which is indeed the only real and essential part of our constitution,⁹ it is impossible that we should know anything with certainty in this life,¹ as our faculties are in our present condition incapacitated for the complete investigation of this branch of knowledge. In like manner is an animal wholly unfitted to comprehend any of the great principles of religion or morality. They are utterly beyond its conception. It possesses no powers which enable it to understand the subject.

Probably, indeed, one of our own species who is wholly uneducated, such as a negro or an ignorant peasant, may have as imperfect a comprehension of the higher principles of philosophy, as the most enlightened and gifted philosopher has of the actual nature of the soul. But as the ignorance of the former is no bar to his acquiring an adequate knowledge of those principles, by the enlargement and cultivation of his intellectual faculties; so in the case of the philosopher, his being in his present condition unable to discover the nature of the soul, is no ground for supposing that in a future and more exalted state of being and intelligence, he may not obtain a complete acquaintance with the subject.

The whole, indeed, of what in our present condition we really know of the soul, is that it is that part of our constitution which forms our real and essential being, by which we think, and perceive, and reason, and perform every intellectual and every moral operation; and that it is also the actual being which is affected when any of our emotions or passions are excited.

The general notion of the ancient philosophers seems to have been that the soul was an emanation from the Deity, pre-existent before the body, and self-existent after its dissolution. Socrates and Plato conceived the soul to be immortal, and capable of full perfection and happiness in a future state. Both Virgil and Juvenal, echoing probably the opinions of the philosophers of their time, appear to have considered the soul to

out of the substance of God, actuate terrestrial bodies, and going from thence return into God.—*On the Soul of Brutes*, c. i. p. 2.

⁸ *Origen* held that God, angels, and the souls of men are one and the same substance.

⁹ *Sir W. Lawrence*, however, contends that “the theological doctrine of the soul, and its separate existence, has nothing to do with this psychological question,”—the nature of life.—*Lectures on Comparative Anatomy*, s. 1.

And *Mr. Smee* goes the length of asserting that the doctrine of the body being animated and directed by an immaterial soul, “is now not held by any natural philosopher of note.”—*Instinct and Reason*, p. 212.

¹ *Malebranche* tells us that we know nothing of our own souls but what we feel pass within us; and that we have not so perfect a knowledge of the nature of the soul as of the nature of our bodies.—*Search after Truth*, b. iii. c. vii. s. 4.

be a sort of fiery vigour of celestial origin. Even Locke seems to have regarded the soul as a refined volatile ethereal species of matter, endowed with the power of thought and action.²

The soul it is which is at all events the only, and the whole intelligent and immortal part of us. What are considered the faculties of the mind, are the active powers of the soul; and the sensations, emotions, and passions constitute its passive capacities of being acted upon.

2. *Mind.*

By what is ordinarily termed mind, I should define to mean the intellectual portion or active power of that spiritual being or existence which we term the soul. What the limbs are to the trunk of the body, the mind and its faculties are to the soul.³

By spirit and soul, the same being is generally meant; and by those terms are denoted the whole spiritual, intelligent, invisible part of our constitution. Mind signifies the property of intelligence belonging to the soul, as does also the term intellect.

By certain persons it has nevertheless been contended that there are two separate, distinct, and independent beings or principles existent in man, the spirit and the soul, respectively termed in Greek, πνεῦμα, or πνοή, and ψυχή; the one being intelligent and immortal, the other material, unintelligent, and mortal. But this theory consists in reality only in considering the spirit as the capacity, or principle, or power, whereby the soul exercises its intelligence. Consequently, it appears to be a matter of but little moment whether we deem a being capable of exercising intelligence by itself, or by reason or means of some adjunctive power annexed to it. In this case, therefore, the soul would be concluded to exert intelligence through the spirit, instead of by itself; in a manner analogous to that in which the soul is supposed to effect certain operations through the body, and not by itself alone. Viewing the matter in this light, the actual and essential difference as to the meaning of the words ψυχή and πνεῦμα appears to be this. The former is the substance of the soul; the latter its intelligent and active

² Locke, in his *First Letter to the Bishop of Worcester*, remarks that "he that will look into the first book of Cicero's 'Tusculan' questions, and into the sixth book of Virgil's 'Æneid,' will find that those two great men who, of all the Romans, best understood philosophy, thought, or at any rate did not deny, the soul to be a subtile matter, which might come under the name of aura, or ignis, or ether; and this soul they both of them called 'spiritus,' in the motion of which it is plain they included only thought and active motion, without the total exclusion of matter."

³ According to *Bishop Berkeley*, "the mind, spirit, or soul is the indivisible, unextended thing which thinks, acts, and perceives."—*Principles of Human Knowledge*, p. 286.

property, or endowment, or power—in other words, the mind. The former is to the latter what the body is to the soul. The spirit, or *πνεῦμα*, has in reality no separate independent existence, it consisting only in the operation of the soul, as speaking is the operation of the tongue, and seeing the operation of the eye. Thus regarded, there can be no doubt of the spirit or mind's strict essential absolute immateriality; just as seeing and hearing possess no material or actual being, although the senses which are the organs of these performances have a real palpable and visible existence.

3. *Spirit.*

The supposition that man is endowed with a spiritual as well as a material body, which serves as a sort of substratum for the soul to exist or reside in, and which was held by some of the old divines and metaphysicians during the early ages, arises from the consciousness of a necessity for some medium of real existence for the soul, and from the conviction that a being wholly immaterial cannot subsist by itself. But surely it is at once more satisfactory and rational to concede to the soul a real existence, than to deny it such an existence, and yet to endeavour to atone for such a deficiency by annexing another being to it. Whether, therefore, we grant to man a spiritual body, denying that the soul itself has any sort of material existence, or whether we conclude that the soul itself consists in a sort of spiritual essence, such as some suppose annexed to the soul as its spiritual body, does not appear to be a matter of very essential importance. On the whole, nevertheless, there seems to me neither warrant nor necessity for supposing the existence of such a spiritual body in our present state; although we may conclude that after the resurrection, as indeed the Scriptures expressly assure us, such frames will be annexed to our souls instead of the gross material frames they now inhabit. But if our material bodies are then to be rendered spiritual, what will become of our already acquired spiritual bodies? We shall then possess two spiritual bodies of the same nature, which seems unreasonable. I conclude, therefore, that what is called the spiritual body, is but in reality the substance of the soul; and that what is by those contending for a spiritual body during our condition in this life, believed to be the soul, consists in reality only, either in certain of the qualities, or in certain operations of this being, which they would thus reduce to a mere abstract nonentity.

Another important question may here be raised as to the nature of these two beings, spirit and soul, which is whether they are in any case separable and divisible one from another,

as the body and soul are, or whether they are always and necessarily united. If they are ever on any occasion separable, then are they two distinct and independent beings, and the one may act and exist wholly independent of the other. But if, as will no doubt be contended by all who maintain that there is a spirit as well as a soul within us, they are absolutely united and inseparable—the soul never acting except through the agency of the spirit—in that case I maintain, with the utmost confidence, that there is necessarily only one being within us; that the soul is merely the material substance or substratum of the spirit; and that the spirit is but the active property of the soul.

Although we know not of the existence of the soul or spirit by sight, as even our own eyes we are unable to see;⁴ nor by corporeal feeling, although it is by the soul alone that we really feel, because to feeling as well as to sight it is too refined to be palpable; we are, nevertheless, convinced of the actual existence of our souls through the medium of consciousness, which is as it were the self-perception of the soul, and by which we have as satisfactory an assurance of its real existence, as of that of our material frames by touch or sight. It is, nevertheless, possible that spirits might not only be existent, but about us, although they are invisible to us,⁵ even supposing them to be material, which would be the case if their substance was of a very fine transparency, greater than that of water, or crystal, or the air, or certain gases; or if they were intangible, like the substance of certain fluids, as in the case of electricity, which have at the same time great power. In a celestial atmosphere, which we may infer to be specially adapted for celestial and spiritual beings, spirits may not only be visible to each other, but to spiritualized bodies also, and their energies and capacities may be then vastly extended. Visibility and tangibility are, nevertheless, by no means essential qualities even to all material substances, and cannot consequently be necessary in the constitution of spirits. The wind and many gases of the most powerful kind, as also electricity and magnetism, we can neither see nor touch.

The spiritual constitution of man is moreover probably in many respects strictly analogous to his material, and that in a variety of ways.⁶

⁴ *Mr. Wake* well observes that positive science allows the existence of matter in so attenuated a condition, that it can be known only by the effects of its motion; and that the mere non-perceptibility of spirit is no proof of its non-existence.—*Chapters on Man*, p. 293.

⁵ *Dr. Henry More* contends that the existence of apparitions affords an undeniable argument for that of spirits or incorporeal substances.—*Immortality of the Soul*, p. 90.

⁶ *Malebranche* says that the inclinations of spirits seem to be in the spiritual world what the motions of bodies are in the material.—*Search after Truth*, b. iv. c. i. s. 1.

The soul, or spirit, has been erroneously stated by some physiologists to be the mere action of the brain and nervous system.⁷ As contrary to reason is it to assert that a man who guides and conducts a ship is the mere action of the ship. The brain and the nervous system may, however, be made to act without the mind, which must therefore be an independent principle of itself. And if it be objected, as an insuperable difficulty to the existence of soul or spirit, that although we are aware of consciousness, we are utterly unable to conceive of soul; surely there is a still greater difficulty in believing in consciousness, without supposing the existence of soul also.

4. *Various Orders of Spiritual Beings.*

Of the several branches of knowledge which the mind of man is capacitated to embrace, those which concern its own nature and being, and the nature and being of existences of the same order with our souls, invisible, immortal, and spiritual, is of the highest and most transcendent description to which we can aspire. Of the real existence of spiritual beings we are, moreover, as well assured as we are of the existence of those which are material. That beings of this nature are of different orders and degrees, we are also convinced. And so far as we are able either to obtain information, or to reason upon the subject, the variety of spiritual existences is quite as extensive as is that of material beings.⁸ Probably, indeed, it is much greater, and may be of an extent absolutely infinite. Indeed, to every animated material being some spiritual existence may be supposed to be annexed. In addition to which there are doubtless numerous spiritual existences, wholly independent of, and unconnected with, any material being or frame. If we only bear in mind, in the lower ranks of creation, even in the insect world, how many different species there are of animated beings, each endowed with its separate independent order of instinctive intelligence; we cannot but conclude that the diversities of spiritual beings or existences, having relation to this order alone, must be at least equally numerous with those orders. We must consider also what varieties of animals there are throughout each order of creation in a corresponding manner; whence it is but reasonable to conclude that the several kinds of spiritual existence correspond with those of

⁷ *Smee's Instinct and Reason*, pp. 12, 16, 218.

⁸ *Locke* appears to have been impressed with the notion that there are "numberless" orders of beings, both above and below us.—*Essay on the Understanding*, b. iii. c. vi. s. 14.

animal creation, and are as numerous and as extensive. How vast, and indeed almost infinite, then, must be the variety of spiritual existences when taken together through all their orders!

It may, moreover, not unreasonably be inferred not only that there is, in many important and even essential respects, a strict analogy between the soul and the body; but that as different animated frames are endowed with various organs of several kinds, each respectively adapted for the particular purposes they are specially intended to serve—some being extensively, and in a very complicated manner in this respect constituted, and others having but very little and very simple organization: so, among souls and spiritual beings, some may be gifted with many and various faculties and capacities, while others have but very few, and certain of them scarcely any active faculties or capacities whatever, but merely powers or endowments of a lower kind, not even intelligent in their nature. And this variation may exist, not only among different species of souls and spirits, but also to a large extent among different souls and spirits of the same species.

If we proceed to take a survey of the universe at large, we must first look up to God as the Supreme Head of it, both as its Author and as the Being of highest perfection throughout the system. Then follow different orders of purely spiritual intelligences, of which there must be presumed to be as many, varying as much one from another in their endowments and nature, as there are different kinds of animals in our world. Next to these exalted beings comes man—a compound of them and of animal nature; and after man succeed the several orders of animals, commencing with those most nearly allied to him, and gradually descending in the scale until we reach those who in their constitution appear to be nearly verging on vegetation. The vegetable creation follows the animal, commencing with that kind which is most allied to the latter, and descending in the scale until we verge on mere mineral creations. Last in the order, these and other inert and lifeless productions, close the magnificent array of the Creator's works.

5. *Infinity of Existences Creation throughout.*

How far, through what spheres, and bounded by what limits,⁹ the created animated world around us extends—what orders and

⁹ *Sir Isaac Newton* inquired, "If all places to which we have access are filled with living creatures, why should all these immense spaces of the heavens above the clouds be incapable of inhabitants?"—*Life by Brewster*, vol. ii. p. 354.

gradations of beings there are, on the one hand, between the Creator and ourselves, and, on the other hand, descending downwards even considerably beyond the minutest animalcule already known to us—might form an extensive and interesting, although perhaps not very satisfactory subject for speculation.¹ That there are many, and probably many orders of spiritual beings superior to us, of different degrees, and fulfilling various offices in relation to our wants and duties both here and hereafter—that some of these beings may, like the great fallen archangel, bear no distant resemblance as regards their power and capacities to the Creator Himself, while others are much below them, and probably approximate in their nature to the soul of man—we may infer more or less fully from Revelation itself.

It is not only no proof of, but it does not even afford a presumption of the non-existence of spirits, and of their not being about us, that we do not actually see them. The stars are fully as existent in the daytime as at night, although it is during the night alone that they are visible to us, and even only then when clouds do not intercept the view of them. So also spirits may be ever about us, and would be at once perceptible to us, were we not enveloped in the cloud of matter, and their presence obscured by the glare of terrestrial objects, by which we are surrounded.

How far, and to what extent, the progression of animal existence in a downward direction, is continued by the creation of successive orders of vital organized beings, considerably beyond the limits of the lowest known animalcule—so that even each order of animalcule may have its own animalcule in infinite succession—would form a no less curious topic of inquiry. If it be objected, as a conclusive argument against the extensive continuance of animal existence beyond the limits of already known animalcule, that the smallest with which we are acquainted exhibit in their corporeal structure certain tokens, as from the simplicity or other quality of their organs, that they have reached the very verge of animal creation; may not the same argument be urged with regard to the oyster or the sea-anemone, which might therefore be contended to be, necessarily, the smallest animals in the world? If such reasoning is of any weight, it might also be applied to the appearance of the planets, especially of the moon, as seen by us through the most powerful telescopes; and we might conclude, from the seeming simplicity of their structure, that there can be no inhabitants in any of them. Although man, from his peculiar position and the

¹ *Locke suggested the existence of an infinite number of spirits, of various ranks and kinds.—Essay on the Understanding, b. iv. c. iii. s. 27.*

formation of his organs, can only perceive and construct objects and frames of a size bearing a certain relation to his own; yet the Creator, who is not so limited, is restrained by no such imperfection. With Him it costs no greater effort to call a world into being than to create a worm; and the humblest animalcule is by Him as perfectly formed as the noblest beast or bird.

Organization, indeed, appears to extend and descend to the remotest bounds of creation. Not only do we discern it in the most diminutive animals, but the particles of the very fluids themselves, as in the case of the blood, have been ascertained to be organic. And if the blood of the larger animals is organic, that of the smaller animals also, and even of the minutest animalcule, may be reasonably supposed to be so as well. And if the particles of the blood are organic, the particles of some of the other vital fluids—indeed, all of them which are constituted of particles—may be organic also. And as life extends wherever there is organic matter, each of these particles of each of these organic fluids must be concluded to be endowed with life. Heat and cold indeed, far more than relative size, supply the boundaries of animal life, which can only exist in a medial condition as regards temperature. And this is the principle in which really consists the influence of climate.

Moreover, the organization of some of the smallest and most insignificant insects, as evinced by their comparatively far greater strength and agility, appears even more perfect than that of the larger animals. It is further to be borne in mind that the real boundary in animal creation is not formed by size or structure of frame, but by nearness to vegetable organization. Hence we might conclude that there may be animals of almost infinite variety and minuteness in existence, although to us their nature and endowments are wholly unknown. Nor is it impossible to imagine that even among these there may be an order of intelligent creatures like man. At any rate, our ignorance of them, and our incapacity to discover them, are no proof whatever of their non-existence.

So far, indeed, from the diminutiveness of certain animated frames detracting from their perfection, especially that very high point of perfection in such a being, the power of retaining vitality; if we may credit the assertion of some naturalists, the most vigorous animated frames are those possessed by certain animalcules, whose power of retaining vitality is such that they are not apparently even affected by being immersed for hours in boiling water, or by being deprived of air. Such capacity of endurance ordinarily belongs only to spirit, and not to any organized frames.

There are also some seeds which produce plants² of considerable size, that are nevertheless so small as to be wholly invisible to the eye. Yet these are as perfect in their organization as are those which are the largest. But if material substances do not suffer as regards their perfection from their relative size, surely those which are spiritual ought not to suffer on this account, more especially as size is a quality that belongs far more to matter than to spirit. And if small animals and small seeds are as perfect as those which are large, surely small spirits may be also as perfect. Possibly, indeed, the invisibility of spirits may be owing not to their indensity but to their diminutiveness.

I may here venture further to surmise that, as every department of matter is filled with animated beings who are especially adapted for their particular spheres; so it may be inferred that each distinct development of intellectual and moral nature, may have relation to certain intellectual and moral beings and agencies, by whom it is in some mysterious mode influenced and controlled.

V. ESSENCE OF SPIRITUAL BEING, AND NATURE OF THE SOUL.

PHILOSOPHY, whose soul is truth, should ever, as far as possible, be preserved scrupulously free from error. Yet by error on all sides is it ever beset, and even those very safeguards against error—the terms and definitions resorted to in philosophical disquisition—have themselves been rendered its producers instead of its preventatives. Precision of terms in philosophical argument, is in reality more important than plenitude of facts, and is essential to give value and soundness to those facts. Nevertheless, it is not too much to assert that greater errors in philosophy have originated from the misuse of terms, than from actual mistakes in regard to facts. Terms are like sign-posts to direct the traveller to his destination. If they point in the wrong direction, or are inscribed with the wrong names, they are not simply useless, but lead us in a track the very opposite to that which we desire to follow. Hence what was invented to ensure order, has resulted in confusion. The regularity thus sought to be obtained, has proved far more perplexing than the most complete chaos. Of this we have striking and painful proof when we consider the various, the

² *Dr. H. More* says that God created matter, and several degrees of souls, that is, of such spirits as had all of them an aptitude of being vitally conjoined with matter; the lowest degree of which is that of plants, the next that of beasts.—*Letter vii., Life by Ward*, p. 292.

fluctuating, and even the opposite significations attached to the terms "matter" and "spirit," and the confusion caused from the neglect to append a clear and precise and definite meaning to either, to limit their signification, and to denote their real quality and essence. To such an excess, indeed, has this error been carried, that certain terms applicable to subjects which in their general nature and attributes are ordinarily considered the most opposite of any the universe throughout, have been confounded together and mistaken for each other. By what some have intended distinctly to define as that which is entirely material, they have led others to suppose they meant to describe something as entirely immaterial; while others have been thought to allude to what was immaterial, when they were speaking solely of that which is material. I feel consequently called upon here to premise that by "material" beings I mean, as I have already stated,³ all those which are in any way composed of matter of whatever nature, whether gross and palpable, or existing only in the most refined and aerial substances, such as gases and vapours, and whether visible or invisible. By "immaterial" beings I mean such alone as have no actual real existence in matter of any kind, and do not possess any of its properties, but are mere creations of the mind, and exist solely in idea. By the term "incorporeal" I understand, and here intend to denote, whatever being, although not absolutely devoid of substance or matter, possesses no certain shape or form, as in the case of a mist, the wind, a flash of light. The term "matter" is indeed generally held to include every object, being, or existence that is endowed with any quality or property whatsoever which is perceptible by any one of the senses. Hence the rarest gases, the subtlest rays of light, and even magnetic fluid, must be concluded to be material. The order of being under which spirit is to be comprehended in the above definition, forms an important point for discussion and determination.

Difficult and even perplexing as may be deemed the subject selected for discussion in the present section, yet, on the other hand, to allow our inability to enter upon it, is to confess our incapacity to investigate the actual nature of man, and the most important and essential branch of his constitution. As in the case of many other matters of human inquiry, after doing the utmost which the most able and persevering can accomplish, the mass of ignorance must necessarily be vast in comparison with our modicum of knowledge; the gold that is brought from the mine bears but a small proportion to the dross. All this, however, discouraging as the fact undoubtedly is, ought not to deter the genuine and ardent desirer after truth from an enterprise which affords the hope, or even the

³ *Vide ante*, s. ii. p. 24.

possibility, of results of real value. No great effort was ever achieved without a struggle; no grand triumph without a brave encounter.

Although so nearly connected with us, there is no subject concerning which our knowledge is more limited and more uncertain, than that respecting the quality and essence of that spiritual⁴ being in which alone we really exist; and concerning the nature of that soul which constitutes our actual and essential selves.⁵ We are not even positive as to which of two substances totally opposite to each other, it strictly appertains: whether it is purely and absolutely immaterial and unsubstantial;⁶ whether it partakes of any of the properties of material substance;⁷ or whether it is of a substance different from either, and the property of spirit alone.⁸ Of the actual

⁴ According to *Kant*, the substance of the soul as a simple object of external senses, is not and cannot be proved, nor can the absolute substance of the soul or thinking subject beyond the line of life be demonstrated.—*Critic. of Pure Reason*.

⁵ *Cicero* tells us that *Aristoxinus* maintained that a certain intension of the body, like what is called harmony in music, constituted the soul.—*Tusc. Disp. on Contempt of Death*, 10.

Even *Bishop Berkeley* asserted that no idea can be formed of a soul or spirit, for all ideas whatever being passive and inert, they cannot represent to us by way of image or likeness that which acts.—*Principles of Human Knowledge*, p. 94.

⁶ *Priestley* contends that we have no proper idea of any essence whatever.—*Disquis. on Matter and Spirit*, p. 139.

⁷ According to *Cicero*, *Xenocrates* denied that the soul had any figure, or anything like matter, but said it was a number.—*Tusc. Disp. on Contempt of Death*, 10.

Des Cartes considered the mind as a thinking being, not extended in breadth, length, and depth, and participating in none of the properties of body (*Medit.* 4); and he elsewhere defined the mind to be a substance whose essence or nature is merely thinking (*Med.* 6); and as only a thinking and unextended thing (*Ibid.*); and, according to this author, nothing is to be attributed to the soul but thought.—*Passions of Mind*.

Hobbes, nevertheless, remarked that, although the Scripture acknowledges spirits, yet it nowhere says that they are incorporeal, meaning thereby without dimension and quality.—*Human Nature*, c. xi. s. 5.

According to *Malebranche*, the essence of the mind consists only in thought, as the essence of matter consists only in extension.—*Search after Truth*, b. iii. c. i. s. 1.

Locke, however, asserts that thinking is the action merely, not the essence of the soul; and he observes that the expressions with regard to the soul used by *Cicero*, sufficiently evidence that he who used them had not in his mind separated materiality from the idea of the soul.—*Third Letter to the Bishop of Worcester*.

Dr. H. More tells us that the immediate properties of spirit are penetrability and indiscerptibility.—*Immortality of the Soul*, p. 12.

⁸ *Plato* defined the soul to be an incorporeal essence which cannot be changed substantially. Hence it must be simple, indissoluble, and incorruptible.

Aristotle contended that the soul is not a rare body, consisting of elements, for then it would understand nothing more than the elements themselves.

being and essence of the soul we know, therefore, absolutely nothing.⁹ All that we do know concerning it, is the nature and extent of its operations, from which we may infer somewhat, although very imperfectly and unsatisfactorily, of the nature of the organ from which these operations spring. We can, nevertheless, no more discern the essential nature of our own souls, than we can see our own eyes, except by the reflection of their outward substantial form in a mirror. In an analogous manner this is the mode, and the only mode, in which we attempt to scrutinize the properties and nature of our souls, by the results which they produce from the operations that they effect; and by which we are enabled to judge somewhat, however inadequately, imperfectly, and in many respects erroneously, of the quality of the being by which the shadow is cast.

As regards, moreover, either the essence or the capacity of matter, our knowledge is limited to a very narrow sphere. Concerning its essence, our information is confined to our ability to distinguish it from immaterial existences; but as to the manner in and the extent to which it differs from those existences, we have no certain knowledge whatever. The line of demarcation between the two, is frequently too fine for our feeble ken to trace. As regards the capacity of matter, we know by experience its adaptation for certain physical purposes to which we have applied some species of matter; but we can ascertain the extent neither of its capacity nor of its incapacity for any spiritual purposes or ends. All that we do know is that spirit can and does act upon matter, and that the latter is made subservient to the uses of the former, of which we have experience and evidence in the case of our own bodies and souls. We know not, however, whether all matter, or whether only certain species of matter, are subject to spiritual operation;¹ and we are wholly ignorant in what manner the one acts upon the other. Whether matter can in any case be endowed with intelligence, and whether spiritual intelligences have anything of matter pertaining to them, we are also wholly ignorant.

⁹ Cicero speaks somewhat loosely and vaguely of the soul being compounded of fire or thin air and a moderate solar heat.—*Tusc. Disp. on Contempt of Death*, 19, 29.

Behmen asserts that the soul is not a substance or being in or of this world, and yet he speaks of the flesh, blood, and water of the soul, and terms it a magic fire, whose image or form is generated in the light, out of the magic fire (*Six Points*, 1). In another work he asserts the soul to be the inward fire in the inward blood of the heart (*Questions of the Soul Answered*, c. xi.); and in one passage he tells us that the soul is a magic fire whose soul is generated in the light, and though itself be no substance, yet it hath a substance and preservation, which is its flesh, blood, and water.—*Brief Exposition of the Six Small Points*, 1.

¹ *Hartley* thought that there is an intermediate elementary body between the mind and the gross body.—*Priestley's Hartley, Introductory Essays*, 2, 3.

The objection to supposing a being which is in its nature and essence purely and absolutely immaterial, to be capable of energetic action, and of union with a being that is absolutely material; is based on the supposition that a being of the former kind is too unsubstantial and unreal to be adapted either for any actual exertion in or by itself, or for exercising any substantial influence upon any other being. The objection to matter possessing any capacity of this sort, rests on the supposition that it is too gross and dense to be fitted for operations of this description of either kind. But if both these beings or substances in their pure and separate state are alike, if not equally disqualified for operations of this class, is it not possible that by the fusion of the two, or allowing to each certain of the properties possessed by the other, a being may be constituted capable of the operations which neither alone can effect, analogous indeed to what we do see accomplished in the case of man, who is constituted and made up of two beings of opposite qualities? Indeed, unless the soul possesses certain endowments which rescue it from the condition of nonentity and unreality which characterizes absolutely immaterial beings, it appears difficult to imagine how it could either be united to a material frame, or exercise any influence over it when so united.

The capacity of matter for various purposes, and in various ways, appears indeed to be almost infinite, alike as regards its modifications and its operations. Its capacity for union with, for being acted upon, and in its turn for influencing also, spiritual or immaterial beings, such as the soul of man, must moreover be here taken into account. But if matter can be fully acted upon and made to act, is it to be supposed wholly incapable of action of itself? And if it can act of itself, it must be capable of originating action, which indeed appears to be a necessary consequence of the capacity for action.

1. *Capacity of Matter for Spiritual Adaptation.*

From what has already been premised in the present section, it would appear that what we really know of matter is not as regards its essence, but the operations it is capable of effecting. Of these operations, however, we know but little that is definite and certain.

Although we cannot suppose that a gross material being or substance can of itself think and be endowed with intellectual faculties; and although it appears to be altogether at variance with our experience, and our conclusions derived from that experience, to suppose the possibility of gross material bodies being

able to reason ;² yet it does not appear to me to be altogether inconsistent with all this to believe, as far as we can speculate with rationality upon such matters, that certain beings or substances of a nature intrinsically and essentially material, but of active properties and qualities, may constitute the actual substratum in the constitution of an intellectual spiritual being, endowed with rational and active powers, such as the soul of man.³ Nor does it seem to me to be more difficult to suppose that a material being can reason, than to suppose that an immaterial being reasons through the aid of a material frame or organ. In the latter case, while the difficulty of believing a material substance to be exercised in reasoning still remains, there is also the anomaly of the union and co-action of two beings of an opposite nature, the one entirely and absolutely material, the other as completely immaterial.

Nor, according to the tenor of the principles propounded even by Revelation, is the absolute immateriality of the soul essential to its immortality; inasmuch as from the direct teaching of the inspired volume, it would certainly appear that mankind will rise again with corporeal frames, which will be consequently material as well as immortal.

Different substances, which are each essentially material, differ from one another as regards their active properties and powers, as much as we can conceive some material and some immaterial beings to do. While certain of the former kind consist of a substance very gross and inert, others appear to be possessed of very lively and active properties. Nor is it unreasonable to suppose that, as in the other divisions of nature, the precise line of demarcation between some animals and some vegetables, and between some vegetables and some minerals, can scarcely be traced; so that between some material and some immaterial beings can hardly be defined. And surely there is

² Norris lays it down somewhat summarily, that the soul must be immaterial because matter cannot think. (*Letters to Dodwell on the Immortality of the Soul*, p. 90). He also assures us that the soul is immortal, because God made it so (but without offering any proof of this fact), as also because this is to be inferred from Scripture.—*Ibid*.

Bishop Berkeley remarks that "they who hold the soul of man to be only a thin vital flame, a system of animal spirits, make it perishing and corruptible as the body, since there is nothing more easily dissipated than such a being, which it is naturally impossible should survive the ruin of the tabernacle wherein it is enclosed."—*Principles of Human Knowledge*, p. 192.

Locke remarks that "we possibly shall never be able to know whether any material being thinks or no."—*Essay on the Understanding*, b. iv. c. iii. s. 6.

³ Locke suggests that it is not impossible Omnipotency has given to some systems of matter fitly disposed a power to perceive and think, or else joined and fixed to matter so disposed a thinking immaterial substance.—*Essay on the Understanding*, b. iv. c. iii. s. 6.

as little distinction between some plants and some minerals, and some animals and some plants, as between some immaterial and some material beings. How vast, on the other hand, is the difference between a stone and a flame, or a piece of wood and a ray of light; yet both are equally in the strict sense material substances. Because *some* matter does not think, it does not follow that *no* matter, however modified or endowed, cannot do so. Because some matter is not capable of growth or susceptible of change, it does not follow that all matter is incapable and unsusceptible of these operations;⁴ and several of those writers who contend most vehemently for the absolute immateriality of the soul, admit their belief that it has for its seat the brain, within the precincts of which it is therefore confined. And thus extension, which is one of the characteristic properties of matter, is admitted by them to belong to the soul.

2. *Reduction of Absolute Immateriality to Essential Non-existence.*

Certain persons, however, in their ardent desire to prove the soul to be an immaterial being, and to be wholly independent of matter, reduce it to a mere nonentity, and deprive it of all real substance, all actual existence whatsoever. It must be borne in mind, nevertheless, that if the soul is purely and absolutely immaterial, it can have no relation to space;⁵ and if it have no relation to space, it cannot reside or be comprehended in the body; and if it cannot be comprehended in the body, then it makes no difference whether a man be alive or dead, as in both cases alike his soul exists, although in the one case it is separated from, in the other resident in, the body.

We cannot suppose even the Almighty Himself to be so absolutely and entirely immaterial, as to be devoid of all substance of every, even the most subtle and refined, kind;⁶

⁴ Yet some metaphysicians of high repute, as will be seen by the notes appended to this work, have maintained the contrary.

⁵ *Hobbes* remarks that the terms in which the Scripture speaks both of spirits and angels implies their locality, and consequently dimension and body, and therefore favours their being corporeal.—*Human Nature*, c. xi. s. 5.

⁶ *Origen* held that the Divine nature, though free from gross corporeality, is in some sense material.

So far as he is in this place intelligible, which is certainly not very far, *Behmen* appears to reduce the being of God to a mere idea or shadow.—*Divine Revelation*, Quest. iii. 3.

Priestley supposes the Deity to be an immaterial substance, incapable of local presence.—*Disquis. on Matter and Spirit*, p. 138.

Sir Isaac Newton lays it down that "God is destitute of all body, and of all bodily shape, and therefore cannot be seen, heard, nor touched, and that we have ideas of His attributes, but we know not at all what is the

whereby we should reduce the essence of the first and greatest of all beings below that of the smallest, and resolve the Creator of all things into an absolute nothing. Angels, too, we can hardly believe to be devoid of all substantial being; and yet they are doubtless both immortal and intelligent.

Those, however, who contend that the soul is so extensively and absolutely immaterial and unsubstantial as to possess nothing whatever of substance, or even of being,⁷ reduce it to a mere idea, so that it exists in the mind only, and but abstractedly, just as an adverb may be said to do, and has precisely and solely the same amount of being and reality with that or any other part of speech. But if it be replied that, although the soul is no more material or substantial than an adverb, yet it differs essentially from it in possessing important active powers and energies, by which it can affect and excite both itself and other beings; this at once proves that it must necessarily possess something of substantiality and materiality—that is, of reality—in itself, in order to accomplish these operations, and, consequently, that it cannot be a mere purely immaterial unsubstantial, that is an abstract and essentially non-existing being, a mere chimera of the mind,⁸ such as is an adverb, but such as is not the soul. If, moreover, the soul is but a chimera of the mind, like an adverb, like an adverb it can be created by the mind at pleasure, and at pleasure can be destroyed; so that, instead of being of all things the most absolutely immortal and indestructible, it is in reality the least so, and is ever ready, and from the slightest cause, to perish.

substance of anything whatever" (*Principia, Schol. Gen.*). This great philosopher, however, even here seems to admit a "substance" of some kind; and in another part of the same work he remarks of God that "He is omnipresent, not virtually only, but also substantially, for power without substance cannot exist."—*Ibid.*

⁷ Aristotle appears to have maintained the immateriality of the soul, and inferred from thence the impossibility of its dissolution; that is, that what never really existed can never cease to exist.

Plotinus held that though the soul resides in the brain, it is incorporeal, and exists everywhere within the sphere of its energy.—*Eun.* v. l. 1, c. ii.

Poicet held that the essence of the human mind is thought.

⁸ Behmen, for instance, asserts that the soul's spirit is without properties, for it stands without or beyond nature, in the unity of God; for it is the express image of God, namely, an idea, in which God Himself works and dwells.—*Revelation. Microcosms*, 5.

It is also denied by *Des Cartes* that there is anything really existing apart from our thought, and that anything save thought alone pertains to our nature.—*Princ. Phil.*, p. i. art. 8.

Bishop Berkeley remarks that "spirits and ideas are things so wholly different that when we say they exist, they are known, or the like, these words must not be thought to signify anything common to both natures. There is nothing alike or common in them."—*Principles of Human Knowledge*, p. 194.

Locke observes that we can have no other notion of spirit but by the

And if the soul is something more than a mere idea or a chimera of the mind, it must have some actual existence; and if it has some actual existence, then must it necessarily possess a real being, in order to which substantiality and materiality of some kind, and to some extent, are absolutely essential.⁹

By some writers¹ the difficulty of supposing the existence of an absolutely immaterial, unsubstantial, spiritual soul, is attempted to be obviated by maintaining that the intellect in man is clothed with the soul, the soul with fire or spirit, and that through that instrument it governs and orders this gross body. But surely the difficulty is as great in supposing an immaterial principle to be united to one that is of a refined nature, although material, and through that acting upon substance which is gross and material; as in supposing it to be, although of a refined nature, endowed with a certain degree of materiality, by which it is able to act upon gross matter. And if a being is so absolutely immaterial that it possesses neither space, shape, nor extension, how can it be clothed with either soul or fire?

Nevertheless, the acute and learned Dr. Henry More,² while he appears to hold that the soul is absolutely immaterial, asserts that it has such an aptitude for union with matter that it is scarce ever disunited from it. It is doubtless, however, as difficult to conceive of a purely immaterial being annexed to matter, and of this union being either essential or serviceable to it; as to conceive of a being of a spiritual and intellectual nature, which is so far material in its essence as to possess all those powers and attributes which the union of a purely immaterial being with matter would confer.

Moreover, if, in the case of man, spirit may be supposed to be united to, or to be enabled to hold communication with the body by means of certain fluids or vapours which are of an intermediate nature between matter and spirit, partaking in certain respects of the properties and qualities of beings of both kinds; surely the soul itself must be also of that compounded and comprehensive nature, whereby alone it is enabled to amalgamate with corporeal substance, which it could not other-

mind attributing all those properties it finds in itself to a sort of beings without consideration of matter.—*Essay on the Understanding*, b. iii. c. vi. s. 11.

⁹ It is doubtless satisfactory to find that so sound a philosopher and so sincere a Christian as *Mr. Isaac Taylor*, does not deem the immateriality of the soul a vital point in either capacity. See *Physical Theory of Another Life*, c. i. p. 12.

The celebrated *Bishop Watson* also expressed the same opinion in the preface to his *Collection of Theological Tracts*.

¹ See *Psychozoia*, by *Dr. Henry More*, notes, p. 341, 1647.

² *Life of Dr. More*, by *Ward*, 1710, *Letter 7*, in reply to important queries by *Lady Conway*.

wise do any more than with a substance of an intermediate and mixed nature.

It also appears to be both unsound and irrational to contend for the soul's absolute immateriality by speaking of it as the act of volition or reasoning, by which we reduce it to a mere operation of the mind ; or to consider it simply as a quality, such as heat or hardness in iron, magnitude or weight in a stone ; or even as an attribute, such as goodness or vice, which, although having no actual existence, is nevertheless cognizable to the mind. Consequently, while the materialists who carry their principles to the utmost extremity, are in dangerous error, and conclude most unphilosophically by denying the eternal being of the soul ; the absolute immaterialists, who carry their notions to a correspondingly erroneous extreme, deny it to have any real being at all. According, indeed, to the arguments of some metaphysicians, the soul cannot be annihilated, only because there is nothing to perish. It cannot even suffer from privation, because it possesses nothing of which it can be deprived. It cannot ever cease to be, because it has never really been !

In fact, in determining the essence of the soul in modern times, we appear to have fallen into the exact counterpart of the error which distinguished the pagan theologians of ancient days. They exalted into deified personality every moral quality of man. We degrade into a moral quality that which is not merely the actually existing, but the only essential part of our being.

3. *Actual Substance essential to Real Existence of Souls.*

If, therefore, the soul be contended to be strictly immaterial, and constituted of no substantial parts or elements, then, as I have already stated, must it exist only as an idea or creation of the imagination, as an axiom or a principle in science may be said to exist, but which has no real being, is only created by the will of the individual in whose mind the term is concocted, and which may be for ever forgotten and lost by the next action or impulse of the mind. We can never, however, be satisfied to consider the soul of so futile a nature as this ; and yet of this character it necessarily must be, if it is allowed to have no material or substantial element in its constitution. Consequently, I conclude, on the whole, that it is most in accordance both with what we know upon the subject, and also with reason, to suppose that the soul is to a certain extent material, or constituted of material substance, although that substance must be presumed to be absolutely pure and uncompounded, like a single elementary particle in the formation of ordinary

matter, which is in and of itself indissoluble and indestructible, although the being of which it is a compound may be dissoluble and destructible so far as regards the separation of its elements.

It seems to me, indeed, to be an absolute necessity that the soul, if it be a really existing being, must have a certain amount of actual material substance in its nature and essence. There must be something that exists in what we term the soul beyond the mere idea of it which we form in the mind; and, as already observed, this mysterious being, if it resides in the body, as it is contended to do, must necessarily possess the material qualities of space and extension. Nor is there in reality any less difficulty in supposing mind and matter to be united, and that mind derives its ideas through matter; than in supposing matter itself to be endowed with intelligence, or the power of receiving ideas, or of thinking. Indeed, that matter may even act of itself without the intervention or propulsion of spirit, is proved by the case of fire, by the action which occurs when an acid and an alkali meet together, and by the operation of detonating powder when subjected to friction; in each of which cases an action is originated quite new and independent of that which the air, or the mixing, or the friction, originally caused or induced.

Nor is it any solid objection to the supposed qualified materiality of the soul to contend, as a consequence, that, if souls have anything whatever of materiality appertaining to them, such as flame, and air, and light, and gas, and the most unsubstantial matters have; then must souls necessarily differ one from another as regards their essence, particular and individual, in point of density, excitability, mobility, and certain other qualities of matter. Indeed, as different fires and the flames which they emit, as also different gases and rays of light, may vary in their essence one from another according as they are produced by the rays of the sun, by electric fluid, or by emanation from gross material bodies, although the main apparent difference between them is occasioned by the nature of the body to which they are annexed, or in which they operate; so souls may owe their apparent diversity one from another to the different character of the particular material frames to which they are annexed, while the real and main difference in that character may be owing to something in their own actual essence. Nay, more than this, this very difference in the essential quality of different souls, may produce an important result in their character, intellectual and moral, and on the bodies to which they are united, and may even in certain cases be the main or sole cause of that difference. Nor is there in reality anything more unreasonable in supposing a soul to be affected by the particular quality of its own being, than by the quality of the material

being to which it is united, but the possibility and even probability of which few would be disposed to question.

Some persons there are, however, who utterly deny that the soul partakes in any respect of the nature of a material being. To what class of beings or existences, then, does it belong? Now, we may specify the following as comprising all the different kinds of known beings or substances, to one of which it must be supposed that the soul appertains:—1. Gross, tangible, and visible material beings, which are actually existent, and possess the qualities of size, weight, and consistency, such as earth and flesh, but which have no mutable or active principle adherent to them. 2. Material and tangible visible beings, which are also actually existent, and possess the qualities of size, weight, and consistency, and have a mutable and active principle adherent to them, such as fire. 3. Material beings which are tangible and actually existing, and of a certain size and consistency, but invisible, and have a mutable and active principle adherent to them, such as vapours and certain gases. 4. Material beings which, if not absolutely intangible, are nevertheless wholly imperceptible to the touch, although actually existent; but possessing neither the qualities of weight or consistency, and scarcely any definite extension, have nevertheless a mutable and active principle adherent to them, such as light, heat, and magnetism. 5. Beings absolutely immaterial, which are intangible and invisible, have no actual existence but in the ideas of the mind, and possess neither the qualities of size, weight, or consistency, such as the ideas of a name, a mathematical proposition, a principle in science.

Now, to one or other of these several classes of beings, must the soul necessarily belong. Beings of the first class are obviously too gross for the soul to be ranked among. If in our desire to avoid one difficulty we rush into the other extreme, and rank it among beings of the fifth class, who are of so trivial a nature indeed as hardly to deserve the name of actual beings; we reduce it to a mere nonentity, a whim of the fancy, which the next moment we may forget, and which is consequently thereupon and thenceforth for ever annihilated. As regards our knowledge of its properties, we may doubtless, as far as we can judge, presume it to possess those most in common with subjects of the second, third, and fourth classes, and probably least in common with those of the first and fifth classes. A being, therefore, wondrously endowed with some of the properties of those which belong to existences of the second, third, and fourth of these classes, may we, I think, with the greatest reason conclude is the human soul.

But it may be objected that the soul, if in any degree material, as I have here supposed it to be, must be constituted of two or more material elements, or separate particles of matter; and

that whatever is so compounded, is necessarily dissoluble and mortal. It does not, however, in every case follow that, because a being is material in its essence, it is constituted of several different elements. Heat, and gases, and particles of light are material in their essence, but uncompounded in their nature.

It may be also objected that these latter subjects are liable to change, which the soul cannot be supposed to be. That the soul, like these substances, is subject to change is, nevertheless, not only consistent with, but essential to, its nature, even if we suppose it to be absolutely immaterial. All simple and uncompounded bodies are liable to change, and are more or less affected and changed when any other body is brought into contact with them.

Nevertheless, even the grossest common material bodies may be eternal in their duration, as well as what are termed immaterial beings, as are the constituent particles of all material substances, which, however changed, are never annihilated. The material spiritualized bodies with which in a future state we are to be clothed, will be also, we are told, immortal.

If it be objected that the soul cannot be material, because it would be in that case divisible, this objection would apply even to many immaterial beings, if they have any real positive existence, as whatever has a whole consists of parts, and may consequently be divided into halves or quarters.

Whatever object is visible to the eye, may be said to be also divisible into parts; and if divisible, consistently with the argument alluded to, they must be also admitted to be material.³ Ghosts, which are of the same nature as the soul, being but disembodied souls, are, however, sometimes visible, appear of certain shapes and dimensions, and are consequently capable of division. But, if so, must they not consist of different parts, which may be separated from each other, whereby the substance of the ghost is rendered destructible? Yet surely on that account no one will deny the reality of their spiritual nature. And if, notwithstanding all this, they are entitled to be so considered, no doubt the soul, which is invisible, has higher claims still to be thus regarded.

The liability, or rather the supposition of certain particular subjects and substances being liable, to divisibility, appears indeed to have been the source of numerous errors, more especially as regards that leading one, and the very false deduction, that whatever is in any respect or mode constituted of more than one part is necessarily therefore divisible; and that whatever is so divisible, is necessarily also destructible.

³ *Des Cartes* remarks that the body from its nature is always divisible, mind entirely indivisible.—*Medit.* 6.

Hence it has been inferred that the soul can have no parts, no separate powers, no distinct properties, or else it must be liable to lose some of these constituents, and be consequently divisible; and that, if divisible, it must be destructible as well. But we might as well infer that the notions of ambition or of a triangle—which, although purely immaterial substances, are nevertheless complex, and so separable,—or even of God Himself, are divisible and destructible on the same ground. The error arises from the circumstance that one term as regards divisibility is exchanged for another at the different stages of the argument. Thus, in some cases, the substance itself may be divisible, while the idea of it is indivisible; or the idea may be divisible, while the substance is indivisible. The fallacy in these cases consists in substituting the idea for the substance, or the substance for the idea, in the manner alluded to. Thus God, who in substance is of all beings the most perfectly indivisible—although at times He has shown Himself in visible form—may, as regards the ideas of Him, be divided into several parts, not only from the union in Him of three Persons in one, but from the numerous attributes and qualities belonging to Him, the ideas of any of which may be subtracted. On the other hand, the substance of heat is divisible, while the idea of it, from its simplicity, is indivisible. Hence we may, I think, satisfactorily conclude that the supposition as to divisibility or indivisibility of any being in any particular mode, forms in reality no argument whatever against its existence in such condition or mode. Perhaps, indeed, every being is divisible in one sense, and indivisible in another.

The test of divisibility is, in fact, on every account, a peculiarly unsatisfactory and inconclusive one, if resorted to to establish the absolute immateriality of the soul. Thus the soul, even though it be admitted to be absolutely immaterial, may be deemed divisible as regards its various passions, and desires, and faculties, which, in idea at least, may be separated from it. Therefore, whether material or immaterial, its divisibility or indivisibility must be the same. But the fact is that it is in idea only that its divisibility exists. Its substance or being is still wholly indivisible. The soul itself is indivisible just as the sense of seeing is indivisible. Although the terms of it may be split into many, the actual being itself will always remain one and entire.

It might perhaps be argued with some degree of plausibility, and may at first sight appear to be a strong point against the materiality of the soul, that, although we might suppose the soul itself to be material, no one would suppose that any of its faculties or capacities, as reason, or taste, or origination, are material; and that if we believe these faculties and capacities to be immaterial, we must allow the soul, of which they are but a

constituent part, to be so too; or that, if we consider the soul to be material, we must suppose its different constituent capacities to be so also. But this, although at first sight it seems to be a very satisfactory argument in favour of the soul's absolute immateriality, will be found, on examination, to rest on a fallacy, as in this case the *power* possessed by the soul, and its *qualities* (from which it derives this power), are confounded one with another. If the soul is material, its powers of acting may greatly depend on its peculiar material constitution, as is the case with regard to the body. But to argue that, because the powers themselves which the soul possesses are not material, therefore the soul itself is not material; is as unreasonable as to attempt to prove that an animal is not a material substance, because its powers of walking, and running, and crying, are not themselves material substances. Indeed, it seems to me that this confounding together of a power annexed to a being with the being itself, is what has led to the opinion which has reduced the soul to a mere abstract idea, or chimera of the imagination. With equal logic might it be argued that because in iron the qualities of hardness and weight are not themselves material, therefore iron itself is not a material substance. Many notions and ideas, which are mere creations of the mind for certain purposes, have no real existence whatever, and cease to be as soon as they cease to be thought of. But will any one presume to think the same of the soul, which was created not by man but by God, and was intended to serve not the mere purpose of a moment, but to live to all eternity? It is surely, moreover, contrary alike to reason, to logic, and to common sense, to suppose that to be the essence of the soul—such as its power of action or thinking—which is in reality only an attribute or quality of it. There must necessarily be some substratum or being in which these faculties reside. It is not more unreasonable to talk of magnitude, or activity, as existences by themselves, independent of any object to which they are attached, than to talk of the soul as consisting of the mere powers and properties which appertain to it.

It has also been urged, in further proof of the absolute immateriality of the soul, that, like the ideas of virtue and vice, of being and nonentity, it is present in and confined to no particular place, nor ever absent from it. But this is surely to reduce the soul to a mere idea or notion of the same kind with them.

Great errors have, moreover, been occasioned by the limited notions and views which have been entertained by certain persons concerning the real nature of the soul. Some, for instance, have considered the intellectual faculties, which are but the powers of the soul, to be the soul itself; whereas it comprises not only these endowments, but the whole intelligent part of

our being : not merely the active powers of discerning, judging, and imagining, but also the passive powers of liability to be moved or agitated by various causes. This confusion of the active powers of the soul with the soul itself, is what has indeed mainly led to the error I have alluded to, of concluding the soul to be necessarily and absolutely immaterial.

4. *An Independent Substance in Spiritual Essence.*

It appears to me, on the whole, that the most satisfactory, and indeed the only philosophical mode of solving this very difficult problem of the real essence of the soul, is to conclude by attributing to this being a distinct, separate, peculiar, and independent substance of its own, differing more or less from all other known substances both as to its nature and properties, though partaking also of the nature of several of them, and which we must term spiritual essence : being an existence, on the one hand, so far real and material as to constitute an actual being or substance, capable of occupying space, and possessing extension, and possibly even form also ; and, on the other hand, being an existence of such an order and nature that it is endowed with intelligence and active powers of various kinds.⁴

Any one inquiring into the subject, who had been born blind, might reasonably conclude from all that he heard of the functions and power of the eye, the extent and variety, nay, infinity, of its range of vision, the celerity with which it transfers its gaze, and from various other circumstances connected with its operations, that this wonderful organ must necessarily be immaterial and spiritual, and that no gross material being or substance could be endowed with such properties and powers.

Without attempting to define what actions in particular appertain, and what peculiar properties belong, to material beings or essences, and what to those which are immaterial, I may venture an opinion that the eye is that material organ and substance above all others which is most typical and representative of the soul, not only because it receives knowledge at once, immediately, and at a glance from each object it surveys, as the soul may be supposed to do, but from the celerity and extent of its action, and its unbounded sphere of operation. In this mode may disembodied spirits be inferred to communicate one with the other, without resorting to language or figures. There is probably, indeed, the same

⁴ *Cudworth* appears to have entertained the notion of a certain kind of existence or substance between matter and spirit, which he termed "plastic nature," and which he supposed to be the immediate instrument of the Divine operation.

difference as regards the manner of receiving knowledge, between a disembodied soul, or a soul united to a spiritualized frame, and a soul immersed in matter, or united to a body ; as there is between the mode of receiving information about a prospect in nature from viewing it by the eye, and from having a minute and detailed description of it afforded to us by the ear.

If, moreover, the eye is capable of seeing, then is matter endowed with the power or capacity of sight. But if it be said that it is the soul which sees, and which confers this capacity upon matter as its medium ; then it is evident that certain spiritual endowments may be bestowed upon matter. And if matter can have the property of being able to see, conferred upon or superadded to it, surely that of thinking may be also superadded. Sight is indeed closely analogous to, if not identical with, and an essential part of thinking, and amounts in fact to perception, which is the incipient stage of this process. So also motion, which is independent of matter, may be superadded to it, and become an essential property of it, as in the case of flame.

Whether and to what extent the eye⁵ may also be regarded as shadowing forth a corporeal representation of the soul in man, can only be a matter of conjecture. The round form appears the most perfect of all shapes, and is assumed by the most perfect and noble of all bodies ; such as the iris of the eye in all animals, and the sun and the planets in the heavens. Eggs and seeds also incline to rotundity, which seems to be the figure that Nature ever favours, and to which all her manipulations tend.⁶ The circle, from its interminable line, is representative or typical of infinity in space. And round bodies, which are constituted by the reduction of the circle to a material shape in each direction, seem peculiarly adapted for the forms of beings infinite in their duration, and immortal in their nature.

Not only, moreover, is the eye typical of the soul, and its appearance often indicative of the peculiar character and disposition of the soul, but any affection of the soul is at once indicated by the state of the eye. Nor is it a conclusive answer to this theory, or rather hypothetical conjecture merely, that the eyes of animals resemble those of man ; and that if the eye of man is representative of his soul, surely those of animals,

⁵ *Behmen* asserts that the soul is like a round globe, and that in its first principle it has the form of an eye.—*Questions of the Soul answered*, 25, arts. 1 and 2.

Buffon also remarks that the eye seems to belong to the soul more than any other organ ; that it participates of its emotions, and is the lively index of the mind.—*Natural History*.

⁶ *Vide ante*, sect. ii. art. 2, p. 30.

resembling those of man, may be contended also to correspond with their souls. So far, however, from this being an objection to, it appears to me to be rather a confirmation of the theory. As the eye of man is to his soul—by the former of which he surveys not only earthly objects but the celestial bodies, and by means of which he pursues laborious studies, and criticizes refined works of art—so also the eye of the animal, by which it observes only terrestrial objects, is to its soul or instinctive being. There is, in fact, the same similarity and the same dissimilarity between the eye of man and the eye of the animal, as between the soul of man and the soul or instinctive being of the animal. Even the eagle, whose ken is so piercing and so far-seeing, employs this noble organ, not as man does, or ought to do, to look upwards from earth to heaven, but when soaring into heaven to look down upon earth.

As regards the substance or essence of the soul, supposing this being to exist by itself independently (whether it be co-existent with, or without the spirit, which is, however, taken and assumed to be but the active principle of the soul instead of a separate being⁷), this is nevertheless by many—indeed, by the generality of those who have treated on this subject—supposed to be absolutely and essentially immaterial, void of all matter and form, and consequently of all real existence whatsoever.

If, however, it be contended that it is very difficult to suppose a substance of any set form—say an ethereal elastic expansive igneous gaseous globe, such as the soul might be conjectured to be—possessing powers of intelligence, and being able to think or reason; it may be objected, in reply, that it is even still more difficult to suppose intellectual operations of any kind carried on without the existence of any actual real substance by whom they may be exerted, and in whom they may reside. It is in reality quite as irrational to imagine that the powers of spiritual substances can exist without the existence of those substances themselves; as to suppose that the powers of material substances can exist without the existence of those substances. Yet, although we should at once see the absurdity of the notion of a power of walking or talking existing without, or independent of, the man who exerts it; we deem it quite rational to conclude that the power of thinking and reasoning may exist without, or independent of, the actual existence of the soul by which it is exercised.

One great error in our reasonings upon this subject, appears to me to consist in our considering the term spiritual being, as applied to the substance of the soul, to be merely a negative idea, implying simply the absence of materiality; whereas it is absolutely positive in the existence of a spiritual being, which

⁷ *Vide ante*, sect. iv. art. 2, 3.

may be as real and essential in its property, as is even gross matter. By spiritual being or essence, therefore, so far as this is intended to denominate the substance of the soul, I do not mean nothingness or non-existence, as most of the opponents of materialism appear to do; but simply such a substance as is void of the gross properties of matter, although actually and positively existing, and possibly partaking of some of its most refined qualities.⁸

It is further to be observed that all beings wholly and essentially immaterial, according to the strict and proper acceptation of this term, of which we have any adequate conception or knowledge, are passive in their nature, and possess no influence over other beings, but are operated upon by them, and derive all their power from the action of these beings. Such are the various qualities belonging to bodies, and the moral virtues with which man is endowed. But the soul is in all respects and essentially an active being, and influences those around it, both material and immaterial.

There are, indeed, as far as we know of material beings, some whose nature is essentially passive, while others appear to be as essentially active, and capable themselves of influencing others. Of the former kind are earth, wood, water. Of the latter kind are fire, light, heat. But all beings essentially immaterial—that is, void of all substance and of all actual reality whatsoever—such as a principle in philosophy, a sum in arithmetic, a notion in the mind—are also from their very nature essentially and entirely passive, and can only be influenced and operated upon by the action of others.

Of the essential quality and substance of the Deity, whether material or immaterial, we are wholly ignorant; but we may presume that substance to be akin to, if not of the same quality as, our souls. We do know, moreover, that the Deity influences and acts upon material beings and substances, and that He is their origin and their Author. Indeed, as far as we can judge, we must on many accounts, and as already observed,⁹ presume Him to be either actually material, or else to be endowed with such qualified immateriality only as I have ascribed to the condition of the soul and other spiritual beings; and that He is not of that absolutely immaterial nature which is reducible to actual non-existence. Indeed, it certainly appears easier and more rational to suppose that God would endow with the active powers possessed by our souls, a being which is material, although not gross and inorganic, than one which is absolutely immaterial and not actually existing.

⁸ Some of the ancient fathers of the Church, *Irenæus*, *Tertullian*, *Arnobius*, and others, were of opinion that the soul is corporeal, but of a very refined substance, like ether.

⁹ *Vide ante*, art. 2, p. 71.

Not only, however, the power of thinking, but that of sensation or feeling, is quite foreign to matter; and it might seem to us to be as difficult to conceive of this property being annexed to matter—unless we had had actual experience of it in the case of our own bodies—as to conceive of intelligence being annexed to it.

Motion is also supposed to be as foreign to the nature of matter as thinking is; and therefore there is no greater difficulty in supposing thinking to be superadded to matter—though we may have as yet no actual experience of this—than there is in supposing motion to be annexed to it, of which we have ample every-day experience.

Although we are acquainted with certain primary material elements only, out of which in various combinations this world of ours and its inhabitants are formed; yet there may be many other elements of a far less gross nature, and out of one or more of these may the soul be constituted. So far, moreover, from the vigour or activity of any body depending on its density; while many of the densest bodies are powerless and inactive, certain of those which are the most ethereal and subtle, are the most powerful and the most active. How superior is fire in this respect to earth, and steam to water!

The soul, as regards its essence, must therefore be either entirely and absolutely material, or entirely and absolutely immaterial, or else of some substance between the two, and possibly peculiar to itself and to spiritual beings, and which we may term spiritual essence. Of this latter substance I consequently conclude the soul to consist.

An existence or substance somewhat approaching to spiritual essence, is perhaps to be found in the magnetic and electric fluids which pervade certain bodies; and which, although actually existent in them as the soul is in man, are neither visible nor tangible, and possibly do not occupy a defined limited particular space within the frame, any more than a spirit does which is annexed to a body. Yet even these fluids, so subtle and almost immaterial, may be made up or constituted of elements, or particles, which in their nature are material and even gross, though of almost infinite minuteness, and so belong to the order of material substances.

Certain of the ancient philosophers; indeed, and among them Aristotle, and Plato, and Zeno, seem to have had a notion, vague and indefinite it may have been, of the existence of a kind of incorporeal subtle substance, which, while it was devoid of all the ordinary properties of matter as regards its being subject to corruption, was nevertheless capable of intelligence and action; and of this substance they supposed that both God and the souls of men consisted.

It is extraordinary indeed how extensively different material

substances in nature vary from one another as regards the degree of their comparative density or subtilty. Thus, how widely in this respect does a gas differ from a stone; yet the power of the gas to operate upon different bodies is far greater than that of the stone. Imagine a substance which is a million times more subtle than the subtlest gas, but a million times more active as regards its powers. In such a material substance as this might not the soul reside, or be constituted of it? If, indeed, the more subtle any substance is, the more active it is; then the more subtle it is, the nearer it approaches to the nature of the soul, and consequently it appears but reasonable to suppose that the soul may be formed of such a substance. Not only electric and magnetic fluids, but also heat, cold, and numerous gases are as invisible, imponderable, intangible, and perhaps in many respects as immaterial as the soul can be supposed to be, besides each possessing many active powers. May not the soul, therefore, in its essence assimilate to the nature of some or one of these substances?¹

As the difference is almost imperceptible between the several ranks of animal creation, and is so minute and undefined as nearly to merge them into beings of the same class, men and animals, and reptiles, and insects, and vegetables, and minerals, being so intimately blended together, and their various species running as it were each into those of the other: so the essential difference between certain beings that are material and those which are immaterial, may be in a corresponding manner equally difficult to distinguish; and it may be very hard to discern the boundary-line between them, or to define precisely what peculiar property and essences belong strictly to, and characterize each particular order.

If, moreover, the soul was of that absolutely and essentially immaterial nature that has been contended for, it seems difficult to imagine how it could be affected by the condition and mutations of the material frame or body, especially to the large extent which is acknowledged to be the case.

In the investigation of spirit we have this advantage over that of matter, that while in the latter case we apply our minds to the subject only indirectly through the medium of our corporeal organs; in the case of the former we apply our minds

¹ *Priestley*, however, contends that no attenuation of matter brings it at all nearer to the nature of a substance that has no common property with matter.—*Disquis. on Matter and Spirit*, p. 104.

Drew also maintains that the rarest atmosphere with which we are acquainted, can be no nearer in point of nature to true spirit than a rock of adamant, and we can no more conceive how an alliance can be effected with the one than with the other.—*Drew on the Immateriality and Immortality of the Soul*, p. 3.

directly to the subject, without the necessity of having recourse to any other medium of communication.

The soul or spirit is compared in Scripture to fire;² and, as far as we know of the soul's nature and essence, they seem very nearly to resemble that active and subtle substance. The Almighty is also compared to the sun, the grand and prime source of heat, and light, and fire, Whose place is in the heavens, and who by His beams fills all nature. From this sublime source emanate other fires, which are ignited by it without any diminution of its own lustre—a property which is peculiar to fire and to the soul. The soul, like flame, gradually consumes the body that it ignites; and its own quality, as in the case of flame, is more or less influenced by that of the substance to which it is joined. In soul, as in flame, the being which is derived from it is of the essence of the original being, and its existence is but a continuation of the existence of that from which it sprang. Indeed, on many accounts, fire seems to be the element most allied both to soul and to life, not only from its own ceaseless activity, but, as regards the principle of vitality, from its heat also; and possibly, although not fire itself, being both more active and more subtle than fire, not merely the soul, but life may be possessed of igneous qualities, to which electricity too, especially in the case of life, may be subjoined. And the power of fire to ally itself with, and to be inherent, and invisibly so, in bodies of different kinds, might be contended to be a property which it alone possesses in common with the soul and with life. And as the smallest spark of fire is sufficient to excite at once in the most vivid manner the largest body of inflammable substance; so might it be conjectured that the soul, however potent over the material frame, which it may be as expressly adapted to excite as flame is to excite certain substances, may be but the minutest atomic particle as to its size, far beyond what could be visible to mortal eye.

Moreover, God, who is the highest, noblest, and purest of all spirits, is also represented as appearing, if not existing and consisting, in flame; so that His essence may be supposed to resemble and be akin to fire, although not actually fire. But as fire is the most active and most powerful of all substances, it may nearly resemble the actual essence of the Deity and of the soul, whose essence is probably of the same nature with, and akin to that of God.

² The opinion of *Virgil* and *Juvenal* as to the fiery qualities of the soul has already been adverted to.—*Ante*, p. 62.

As to the question whether the soul be corporeal or incorporeal, *Behmen* replies that it is a fiery globe, with a fire eye and a light eye (*Questions of the Soul answered*, art. 7); and yet he maintains that the pure soul is not corporeal.

Lord Bacon remarks that “flame is a momentary substance, air a fixed; the living spirit in creatures is of a mixed nature.”

But if fire, even in its subtlest form, be deemed too substantial for the substratum in which the soul exists, may it not be constituted of a still more subtle and active substance formed by an exhalation from fire, as the animal spirits may be exhaled from the blood, or the nervous ether or fluid from one of these substances? Or may not certain of the properties of the soul or of life be of this nature?

If, indeed, we imagined that the soul was composed, as regards its substance, by a combination of certain chemical elements, quite different from anything of which we have experience; this surely would not in many respects be comparatively more wonderful than is the result produced by the combination of certain chemical elements with which we are familiar. If life, which appears in every respect to be a principle devoid of gross matter, can be supposed to be constituted by any union or combination of certain chemical elements belonging to our material constitution, may not the substance of the soul be also supposed to be so constituted?

That the nervous ether or fluid does not constitute the soul, is obvious from the distinctive character of their nature and operations. In many instances, when the nerves are exerted, the soul is unconscious of the act, and several operations of the soul are performed without at all affecting the nerves. By certain impulses of the soul, however, the nerves are directly and vigorously affected, and certain affections of the nerves influence the soul with corresponding power. But this very absence of uniformity in reciprocal feeling and action between the two, proves them to be not only distinct principles, but principles independent of each other.

The soul is contended by some to be so absolutely immaterial, as to be not only invisible and destitute of all substance, but to be also without form, and to occupy no given space. But if this be so, how is it that ghosts, which, as already observed,³ are but disembodied spirits, or souls which have been separated from their material frames, can be supposed to be so characterized, while they are stated in Scripture to be both visible and to occupy space; although we are told that in Scripture there is authority for the doctrine of the entire and absolute immateriality of the soul. If souls are essentially immaterial, ghosts must surely be so too. If ghosts are not immaterial, souls cannot be so. And if spirits are seen, they must appear in some form, and occupy some particular space. A soul, too, if it exists in a particular body, must, as has been before remarked, extend itself over some particular space. If it do not exist there, it can be of no consequence to the body whether it is annexed to it or not; and yet we are told on the

³ *Ante*, art. 3, p. 82.

authority of Scripture, as we all know by our own experience, that when the spirit leaves the body, death ensues. Even God Himself is said in Scripture to have a place of abode, although "the heaven of heavens cannot contain Him;" and as regards His influence, and power, and omniscience, He is present everywhere alike. As the sun has its particular locality in one portion of the firmament, yet by its beams fills and animates all nature; so God and spirit, though actually in one part of creation, or of the body, only, animate and influence every portion of it.

Nor can it reasonably be urged that because ghosts are sometimes visible, although on ordinary occasions they are invisible; therefore they may be sometimes material, though not so generally. Their appearance may change, but not so their essential nature. Like many objects in creation, they may for a time cease to be seen, but it surely does not therefore follow that they must then cease to exist. Yet if they are material at one moment and not at another, I hardly know if this must not be concluded to be the case.

Nor is the difficulty at all obviated by asserting that when spirits are seen by men, they are perceived immediately by the soul, without the intervention of the bodily senses, just as disembodied spirits may be supposed to perceive one another; for even in this case there must still be something existing of a certain size and shape, that is actually beheld, which we cannot suppose to be the case with an absolutely immaterial being, such as the virtue of goodness, the idea of nonentity, or an abstract proposition, neither of which, under any modification whatever, are either perceptible, or can have any real existence. Yet of the same nature with them is the soul contended to be, by those who argue for its absolute immateriality.

When, however, we speak of the changes and fluctuations, if we may so term them, which souls and spirits undergo, and of the uncertain and varied forms which they assume, and which may be contended to invalidate their claim to real existence; we should consider as well the extraordinary changes and transmigrations of every variety to which matter itself, which is deemed the most real of all substances, is also subject. Thus water, which is ordinarily a liquid, becomes ice, which is one of the firmest of solids; or it can be converted into steam, which is one of the subtlest of vapours.

It may indeed be difficult to define the shape, or to trace the exact dimensions, of a spirit or of the soul; but it is surely more difficult still to suppose that they are neither of them capable of assuming any definite shape, or of occupying any particular sphere. If this be the case, they must extend themselves and be present everywhere alike, as much beyond as within the bodies to which they belong. But if their extension is limited

to any given space or frame, and they are circumscribed by certain bounds, then are they wanting in the most essential characteristic of purely and absolutely immaterial beings.

Some who contend against the materiality of the soul, however qualified, advance against its existence in any particular locality, dogmas of which the following may be taken as a specimen :—" Though angels and our souls are in bodies, as in their *ubi*, yet they are not there as in a place."⁴ The only sense and meaning to be extracted from this argument, or rather assertion, are, that souls exist in bodies, and at the same time are not in bodies. The one part of the proposition, by simply shifting the terms, directly contradicts the other.

Certain metaphysicians, who have contended very vigorously for the absolute and essential immateriality of the soul in all respects, have, as we have seen, gone so far as to maintain that no modification of matter whatsoever can render it at all qualified for, or capable of, alliance with spirit, and that all matter is alike in this respect.⁵ This, however, is surely at variance with what we appear to know as regards the union between the soul and the body, the former being united to and holding communion with the latter through its most refined and subtle organs only, and never being supposed to be united to or to act upon the grosser parts or organs of our frames. If, on the other hand, we admit, as appears to me undeniable, that one kind of substance is more adapted to be united with, if not actually more allied to, spirit than is another; then it must also follow that some kind of substance is more adapted to form the essence of the soul, and to be capable of all those spiritual exercises and endowments, than is substance of another kind, although certain persons contend that spiritual immaterial essence alone can be so qualified, but without pretending to define in what spiritual immaterial essence really consists.

As regards the elements which may constitute the substance in which the soul might subsist, these must of course be of that pure and simple nature which can be subject to no corruption; which, however, if considered merely as the resolution of matter into its primary constituent elements, may be regarded as a change from a lower state to a higher.⁶ At any rate corruption amounts, not to a dissolution, much less to an annihilation, but only to a mutation of the form, of the substance; and this change is, moreover, one from a transitory and mutable condition, into one which can never again be subject to such revolutions.

But it is acknowledged on all hands, by those who have treated on the substance of the soul, that, whether material or

⁴ *Ross's Philosophical Touchstone*, p. 80.

⁵ See quotations in notes from *Priestly* and *Drew*, *ante*, p. 90.

⁶ *Vide post*, s. ix. art. 4.

immaterial, it is certainly a really existing being ; and one, moreover, which, although not perceptible to the material eye, is doubtless visible during some period or condition of our existence, at all events to some beings, such as spirits like itself when disunited from matter, and to its Creator and Ruler. If, however, as I have already remarked, the soul is visible at all, and at any time, it must be actually existent in some shape or other, and must necessarily possess the qualities of form and extension. And if it possess these qualities, how can we deny it to be a material substance ?

Perhaps the point, after all, which of itself determines the question of the necessity for the materiality or immateriality of the soul, is the question whether intelligence can exist or subsist by itself alone, or whether it must not necessarily reside in or be annexed to some being ; whether it is an independent principle by itself, or merely an endowment or a power belonging to some being. If intelligence can exist by itself, it of course needs no material or independent being as its substratum or support. If it cannot exist by itself, it appears essential for it to exist in, and to be supported by such a being. On the one hand, it appears difficult to imagine how such a power can exist without any being in which it may reside. On the other hand, it is difficult to suppose that the principle of intelligence should be annexed to a substance or being, such as the body, with which it has no kind of affinity in essence ; although it is easy to conceive that the being itself in which it exists,—and whose essence it appears to me reasonable to suppose is of that distinct independent order which I have here suggested,—is that from which intelligence proceeds.

5. *Eternity in Duration, and Growth of the Soul.*

The soul appears to be not only eternal in its duration as such a being, but to be also eternally, and as long as it continues to exist, in a state of constant and permanent progression, so that it ever goes on improving, both as regards its powers and its capacities,⁷ its knowledge and its acquirements. Like the planets revolving round the sun, which at each revolution are attracted nearer and nearer to their grand central orb, it approaches nearer and nearer in its attributes to its Divine origin, more resembling Him as it imbibes more of His Divine wisdom and goodness.⁸

With respect, however, alike to the duration of the soul, its

⁷ *Origen* taught that the souls of the good are continually advancing in perfection, and rising to a higher state.

⁸ *Sir Isaac Newton* declares of God that "He is not eternity or infinity, but He is eternal and infinite."—*Principia, Schol. Gen.*

permanent retention of its powers, and its continual progress in the advancement of those powers ; so far as we are able to reason upon such a subject, it appears to us impossible, from what we know of its very nature, that the soul can either ever acquire any new, or lose any of its present, powers or faculties, which seem an essential part of its being, and to constitute one indivisible essence with it. But if the soul and its faculties are invigorated and enlarged by cultivation, they must consequently and correspondingly be enfeebled and debased by the neglect to exercise them ; and it may therefore be contended that the actual substance of the soul admits of being altered by circumstances ; and that if it can be at all diminished, as regards its power or extent, it must also follow that a large increase of the cause that diminishes it, must ultimately occasion its annihilation ; and that if so, the soul, like the body, must be liable to destruction, although at the same time it is capable, under certain conditions, of enduring to all eternity, which latter indeed is its natural and ordinary destination, unless some particular cause intervenes to terminate its career. In this case, however, although the soul may be improved or injured, extended or limited, by many influences as regards the direction given to its capacities, yet as by this means they are incapable alike of being actually either in the least degree enlarged or diminished, so it must be concluded that they are not of themselves, and without the special agency of God, in certain cases hereafter referred to,⁹ liable to any real change, much less the annihilation, towards which such a diminution would be the first step. If the soul, or its capacities, were liable in the smallest degree to decrease, as a consequence of this they would be liable also to annihilation ; and although change, even involving destruction, may be possible without annihilation, yet there cannot possibly be annihilation without change.

If it be contended that, if the soul at one period appears more feeble than at another, any decrease of strength is an approach to the loss of all strength, and to annihilation itself, which only requires to be extended in order to be completed ; it may be replied that a decrease of strength is by no means necessarily an approach to annihilation, inasmuch as relative amount of strength, which must be always fluctuating, has nothing to do with real being, but is only an appendant quality of it, and that strength may even depart and return again without at all affecting the actual existence of the particular being. Moreover, the apparent variation in the vigour of the soul is caused, not by any fluctuations in the soul itself, but by the mutations of the material being to which it is united.

Nor does it by any means necessarily follow that, because the

⁹ *Vide post*, s. ix. art. 5.

soul is subject to changes in its condition, to pain, and even to disease, it is consequently liable also to annihilation or dissolution. For although each of these occurrences may be deemed to be an advancement towards dissolution, there is no reason to conclude that the progress in this direction will ever proceed so far as to occasion, or even endanger, the death or destruction of the soul. There are many changes in nature, none of which, however, even tend to a dissolution; and should dissolution of the soul ever happen, it will be effected by causes wholly different to, and quite independent of these changes. Even the Deity Himself is subject to emotion, and also to pain; and yet it is alike irreverent and impossible to imagine that He is from any cause capable of either dissolution or annihilation.

If, moreover, it was proved, or if we had even any substantial reason for believing, that the body served to supply life and intelligence,—if the body, and not the soul, could be supposed to be the thinking portion of our constitution,—in such case the destruction of the body must necessarily prove to be that of our whole intelligent and vital being. But as the soul and not the body is the intelligent part of us, there is no solid ground for concluding that the death of the body will either occasion or constitute the destruction or death of the soul.

It is, perhaps, in reality, easier to conceive of any object being unannihilable than annihilable, however the contrary may appear on first reflecting upon the matter. Thus, every substance with which we are acquainted seems to be destructible, as a flower, an animal, a piece of furniture; and we on that account presume it to be also annihilable. But, in reality, the two are very distinct processes. We can destroy the flower, or animal, or furniture in question by changing its form; but we cannot by any means annihilate the matter of which it was constituted. Even if we consume it by fire, which appears to be the most complete mode of destroying it, we shall have effected nothing towards its actual annihilation, inasmuch as its primary elements will still remain, although what formerly existed as leaf, or bone, or wood, may now be transformed into ashes or smoke. But as regards the being of our souls, they are naturally neither destructible nor annihilable, nor even mutable. They change neither their nature nor their elements, but their condition only, which does not amount to or imply any change of actual being. Whether this is from always existing in primary elements, such as those from which all substances first sprang, and into which they all ultimately resolve, or from whatever other cause, we know not, and in this life probably never shall know. As all matter is apparently, naturally, essentially unannihilable, so we may infer that all spirit is, in a corresponding manner, naturally, essentially, and inherently immortal.

Indeed, as the body (so far as regards the inannihilability of

its primary essential particles) is proved to be imperishable, there can be no difficulty in supposing the soul to be immortal. The body, by corruption, resolves into its original elements, existence in which is but the natural and ordinary condition of the soul.

It might, nevertheless, be suggested as not impossible that the soul may perish or be dissolved by attenuation, in a manner corresponding with or analogous to that in which heat in any body is extinguished, or ceases to attach to it; and which may be occasioned either by destroying the principle which originated or sustained the heat, as fire in an ignited body, or by the gradual and continued expansion and dispersion of the substance of the heat itself, whereby it becomes so extensively distributed that, although actually existent still, and as essentially so as before, it ceases to have any perceptible, and eventually any real being, and fades through infinite attenuation.

There are, indeed, six different modes in which we might conjecture, according to our notions of the laws of nature, that souls may be destroyed. 1. By direct dissolution, as in the case of all matter, even the purest and most simple, being annihilated, and which could be effected by the Deity alone. 2. By dispersion, as when the substance which formed the soul is so separated that as a whole it becomes inactive and inefficient. 3. By attenuation, as when the matter of it is so extensively rarefied that it ceases to have any perceptible or operative substance.¹ 4. By immersion, as when the soul is united to a material frame, either too gross in substance to allow of its proper action, or which is not supplied with organization for the exercise of its powers. 5. By deterioration, as when its constitution and improvement have been entirely neglected, whereby its power and ability are lost. 6. By debasement, as when it is exercised only in the contemplation of trivial or debasing topics, by which its faculties become degraded. Nevertheless, for the reasons already alleged, even these suppositions are wholly insufficient to warrant our belief in the possibility, by any ordinary and natural cause, of the destruction of the soul.

Animals and plants sometimes continue to live for a very long period, and, for aught we can see, they might do so for an indefinite length of time, their different parts and elements being in a continual state of renewal. But the soul lives and continues vigorous, not from the renewal of any of

¹ *Kant* suggested that it would be possible for the soul, after its separation from the body, to have its intensive quality, wherein consists its consciousness, diminished until it became zero, not by division, but by the diminution of its intensity; for consciousness has such a degree of intensity as may diminish in this way until it loses, as it were, the consciousness of its own consciousness.—*Critic of Pure Reason*.

its parts, but because it does not in any respect decay or require renewal.

As the body of man is derived from earth, to which it must ultimately return, so the soul of man is derived from God, to which ultimately it must return also. Each, while united, seems to cleave with a natural affection and partiality to the parent from which it sprang, and to take every opportunity of testifying its loyalty and attachment to the source of its existence. And the influence of these two originals, that of God and of earth, are ever the two opposing principles which alternately sway the conduct of man.

Although the soul may not be of God's actual nature so as to be wholly pure and good, yet it may be of His essence as regards its spirituality, immortality, and intelligence,—by which probably is meant in Scripture the creation of man in the image of God—the soul of man being, moreover, an emanation from God. And as the eye derives all its power of vision through the existence of light, of which the sun is the centre and prime source; so the soul derives all its knowledge and all its power, as well as its being, from God, its Creator and Originator. And as animal nature may be deemed to represent and typify human nature, being an imperfect pattern or reflection of it; so in an analogous manner may human nature represent and typify the nature of God, Who in His attributes and perfections is, however, far higher in proportion to human, than man is to animal nature. And as the human form is imperfectly copied in the animal form, so the human soul imperfectly copies, in its nature and essence, the Divine Being.

The animal world, both as regards the outward form of its creatures and their instinctive being, seems, indeed, to be in a certain way copied from man, who is their perfect type in each respect. Vegetable forms, and their instincts too, are in a corresponding manner copies of animal nature, as are many mineral forms, and whose development appears analogous to vegetable growth. May we not, therefore, by analogous reasoning, infer that man is in a corresponding manner copied from God, the perfect type of all being, alike as regards qualities, essence, and endowment? And as there are, as already observed,² gradations of creatures, through various orders and degrees, from man downwards to the humblest insect; so we may reasonably infer that there are in a corresponding manner, gradations of beings upwards, through various orders and degrees, from man to his Maker.

The mind of a child is apparently weak and undeveloped; but this must be concluded to be owing, not to the condition of the soul itself, but to that of the body to which it is united.

² *Vide ante*, s. iv. art. 5, p. 68.

When the child dies, and the soul is separated from the body, it probably assumes the same status, and is endowed with the same power, as the soul of adults. We may expect to meet our children in another world, not as infants, but as full-grown beings as perfect as ourselves; and, consequently, the spiritualized frames with which they will eventually be endowed, will not be of an infantile or imperfect nature, but as entirely developed and complete as those of people at maturity. We have no more reason to infer that the souls and spiritualized frames of children will be immature on account of the immaturity of their bodies, than we have to conclude that the decrepid bodies of old persons will hereafter be permanently represented by debilitated spiritualized frames.

Man resembles animals chiefly during his infancy, and above all in the language of the two at that time. The sounds emitted by both are wholly inarticulate, but they are at the same time exceedingly expressive. The tone, and accent, and modulation of the voice in the case of each, have their exact meaning, and effectively communicate the feelings that called them forth.

Perhaps one of the best and surest proofs of the immutability, if not of the immortality also, of the soul, may be adduced from the fact that, amid all the changes of the body in texture and in temperament, which occur between early youth and old age, in sickness and in health, the soul never varies in the least as regards its own individual particular character and powers; due allowance being made for the necessary influence exerted upon it through its union with the body, and the mutations in the condition of this portion of our being, more especially as regards its activity and vigour, and also in respect to the sway over it exercised by certain of those animal or medial endowments and propensities which are more particularly dependent on the material frame. Yet, however variously these material influences may be exerted, the soul of each person is throughout its career ever found to be endowed with the same particular faculties and capacities, the same particular appetites, passions, and affections, dispositions and desires, and never at all changes as regards its individual character in any of these respects; however much it may vary at different times with respect to the comparative effect of each of these influences under peculiar circumstances, and which, of course, could not be the case were it not an independent being of itself, or were it dependent for its actual existence, or its special peculiarities, upon the body. If, therefore, the soul remains unchanged through all these different mutations of the body, it is but reasonable to suppose that it may exist independent of the body, and that its separation from this material frame would produce no actual change in its condition, except the withdrawal of the influence of those sensations and

emotions and feelings, and other endowments, which are exercised through the bodily organs. And further, that if it is unchanged, as regards its essential nature and character, by any of the various affections of a being to which it is so closely and intimately united as it is to the body, nothing else that can happen to it will materially affect it. Consequently, if no circumstances, however influential, appear calculated to produce any change in it, it may be presumed to be immutable, and, if immutable, also immortal.

The body with which the soul in our present condition is clothed, corresponds with the garments that envelope the body, which serve not merely to protect it from outward view—as the body may the soul in regard to the power of souls to see each other;—but by the peculiar character and fashion of each body, as in the case of those of clothes, may be to a certain extent denoted the quality and characteristics of the soul, just so far as this is desirable or requisite, without divulging beyond what is convenient here. For many purposes of life, and of society and action in a material world, a body is, moreover, almost as necessary as a soul.³

As the body by indulgence in evil propensities, brings on itself disease and many evils, so the soul may be thought able to work out its own degradation and ruin, although not its actual destruction, by various courses independent of its direct condemnation by the Almighty. It may become debased, and degenerate, and dull, through its evil habits, more especially by subjecting itself to the influence of the body.

At different periods of our life we entertain very different notions as to duration. To children a year appears a long space, while to middle-aged persons it seems soon to pass over; and as age increases, time rushes by with accelerated speed at each stage. Whether the decrease in our value of the estimation of time as we approach the end of life is in any way owing to our near entrance upon the confines of eternity, when time must be for ever swallowed up by it, and so our experience of time serves to introduce us to and prepare us for eternity, may serve as matter for conjecture.

But it may be argued, that if the soul is immortal and of infinite duration, it would be reasonable to suppose that this would extend to its past as well as to its future being. Surely, however, the soul may be said to be eternal in its past duration as well as in that which is to come, so far as it existed in God Himself before it emanated from Him and was imparted to man.

³ *Mr. Isaac Taylor* well observes that “the body is not the open bower or tent of the soul, into which any one may walk at pleasure; but it is its castle, from which all other minds may, at pleasure, be excluded.”—*Physical Theory of Another Life*, s. 3.

And in this sense only may God the Son,—declared⁴ to be equally eternal with God the Father, although begotten of Him at a specific time, before which He did not exist except as in the Father; and God the Holy Ghost, who is declared to have proceeded from the Father and the Son, before which period He only existed as in Them;—be considered equally with God the Father to be infinite in duration as regards Their past being, and to have existed from all eternity.

The soul may be inferred to have been communicated from God, and to have been dispensed from His own being to the original parents of the human race, and by them to have been in succession transmitted to their posterity. We may nevertheless conclude it to be possible that the progressive growth and full development of the soul, as already suggested,⁵ like that of any species of living beings, may go on continuously from parent to offspring, commencing in the infant at the precise point which the parent had attained.

It is, moreover, not unreasonable to suppose that the growth of the soul may continue long after the body has ceased to grow, and has arrived at maturity; and, indeed, the soul may be said to grow and to increase whenever it obtains new ideas or fresh knowledge, which it is continually doing, although, like the body, it may be at the same time momentarily losing some of its acquirements, by forgetting what it has learnt. There appears, indeed, to be no reason why, as in the case of the body, the growth of the soul should cease at a certain period of its age (as, unlike the body, it has no specific terms of youth, manhood, and decline), except so far as in certain of its operations it is dependent on the material organs. In some men the soul seems to be ever improving, or growing as it were, while in others it reaches maturity very early; and in the case of certain persons it appears to decline as soon as the bodily organs decrease in vigour through age. The higher the faculties of the soul, the less dependent they are on the bodily organs; and the less dependent they are on the bodily organs, the more capable they are of infinite growth, and of increasing for ever—not merely adding to the soul's store of knowledge, but to its capacity for exertion—more especially as regards invention, and imagination, and taste. Possibly, indeed, one of the joys of eternity is this feeling of continual expansion and invigoration on the part of souls, which every hour are gaining fresh acquirements, and are growing, both as regards their holiness and their knowledge, more and more like their omniscient and all-perfect Creator.

⁴ In those solid concentrations of deep thought, and profound theological learning, the *Athanasian* and *Nicene Creeds*.

⁵ *Vide ante*, s. i. art. 5, p. 21.

The Scripture, however, speaks of "some" persons only being "counted worthy to attain unto the resurrection of the dead;"⁶ as though there were an intermediate state for those who neither deserve the reward of the righteous nor the punishment of the wicked, and for whom a condition of annihilation and oblivion, a deprivation of all existence, may be the mete reward for neglecting to make due use of the period of existence granted to them. In the Book of Daniel we are also told, not that "all," but that "many" shall rise again—an expression which clearly implies that there will be some who will not rise.⁷ Indeed, from the general tenor of Scripture, it may fairly be inferred that some persons only, and not all, will rise again and inherit eternity; that those who do rise and become inheritors of bliss, are such as possess a certain degree of worth or merit, in reward for which they have been made immortal; while those whose lives have been decidedly wicked, will rise to immortality only to receive eternal condemnation; and that there is a third class, who will not rise at all, and who may be presumed to be of that middle condition who have done neither much good nor much evil, so as to deserve either the rewards of Heaven or the punishments of Hell.

Another theory might be propounded, which appears to receive considerable support both from reason and revelation, and which is, that while all souls are immortal, certain bodies only are destined to be raised again, and to be rendered immortal on their reunion to the souls which once possessed them, while the bodies of those not so raised shall for ever perish. And it may be that material frames which are utterly gross and carnal, will not be deemed adapted for immortality, although the souls which they have debased may continue to exist without them. To this economy as regards our future state, it would seem that St. Paul alludes when he speaks of some persons only being counted worthy of the resurrection of the body to eternal life.

Indeed, when St. Paul says that "there shall be a resurrection of the dead, both of the just and the unjust," this by no means excludes the existence of a third class, belonging to neither the just nor the unjust, who are in a middle condition, and who will not rise at all, either to bliss or to condemnation.

The Scriptures moreover declare to us a general, but nowhere a universal, resurrection of the dead. The two terms are widely distinct as to their comprehensiveness. We speak of a general meeting of the inhabitants of a district where a fair proportion of them only are assembled together. But by a universal meeting we should mean one that was attended by all the inhabitants without any exception.

⁶ *Vide* St. Luke xx. 35, Phil. iii. 11, and Romans ii. 7.

⁷ Daniel xii. 2.

Although it may not be appointed to all persons, or even to the generality of mankind, to rise again, and to be reunited to the corporeal frames which they inhabited while on earth; yet even such persons may continue to exist as separate spirits, which is, perhaps, a less perfect condition than one of union to a spiritualized body. These permanently separate spirits may be employed as ministering angels to fill offices of various kinds, and such may angelic beings in general be. Therefore, although all bodies may not rise again, all souls once created may continue to exist for ever. Possibly, however, as already conjectured, some souls will not only never be joined to spiritualized bodies, but will be subject to annihilation, which must undoubtedly be in the power of the Being who created them. Absolute annihilation, so as not to exist even as pure spirits, is probably, however, the lot of but very few. Reunion to the body may be the lot of more; and existence as separate spirits a more common lot still. Possibly also, pure spirits may be consigned to special conditions of happiness and misery, and in various degrees, as we believe to be the lot of those who are united to bodies.

It may be, indeed, that, instead of the absolute destruction or annihilation of the soul, the middle condition already referred to, of neither entire happiness nor entire misery, may be prepared for those whose lives have been decisively characterized by neither virtue nor vice; and which may be a state merely of permanent separation from and independence of the body, to which it will never be reunited, and so will not attain to the resurrection of the dead. Such a condition might be one in which neither Heaven nor Hell would be their portion. But they may be consigned to some other region, possibly in certain of the planets, or wander still upon earth as it has been supposed that some spirits are even now permitted or compelled to do.

God, who at His will created the soul, can, no doubt, at His will destroy it, as indeed He has Himself declared in Scripture. And this may be effected in two ways:—1. Either by causing its entire annihilation by His omnipotent *fiat*, as already pointed out. 2. Or by merging the soul in Himself, or some other being, by which it would no more continue to have a separate existence, than the souls of the original parents of the human race did ere they emanated from God, or than did our own souls until they were separated from those of our parents.

The inannihilability of matter does not prove the inannihilability of the soul, except and so far as the soul is constituted of matter, or in any degree of material element. Even in that case, although matter is inannihilable, it is so mutable that all the relations of mind in regard to it may be not only altered, but destroyed, by the changes that take place in matter. And

as many common substances in nature, such as wood and stone, although destructible by certain causes, are nevertheless inannihilable, retaining their essential elements, but in a new form; so it may be with the soul, that certain causes operating upon it may occasion a change in its condition, although its actual essential being may not be thereby affected, much less annihilated, but it may exist in a lower state, or in a condition of debasement or degeneration, of a nature, perhaps, akin to that of animal being. These are speculations, however, which, as in the case of other investigations of this abstruse character already referred to, that eternity to which they relate, and to which we are all alike approaching, alone can set at rest.

VI. OPERATIONS OF SPIRITUAL BEINGS.

THE subject of the present section, exalted as it is in its nature, and interesting as it is as a topic for investigation, is nevertheless unfortunately one respecting which conjecture is all that we are able to effect, and where certainty is seldom, if ever, arrived at in our research.⁸ Reason may, however, do much to supply the place of real knowledge; and, indeed, a vast proportion of the most valuable, and the best established too, of philosophical determinations of the surest kind, rest on no sounder foundation than that of the conclusion formed through the careful exercise of the judgment. In fact, not only in philosophical, but in practical matters also, this is the case. In astronomy, in theology, and even in law, but a small portion of the decisions are derived from knowledge, absolutely certain, as regards the topics to be dealt with. And it is, perhaps, not too much to lay it down as an axiom, that the higher and the more momentous are the truths connected with any subject submitted for investigation, the less is the degree of absolute certainty at which we are permitted to arrive in their pursuit.

What we do know of the nature of spiritual beings, relates far more to their active operations than to their actual essence. In fact, our only experience of them is derived from an acquaintance with their proceedings. Activity seems, indeed, so intimately connected with spirit, that some have deemed it to be the real being itself. But as no act can be performed without an agent, this is to mistake the thing done for the doer of it. We judge of the character of the agent from the acts that he performs; but this is very different from mistaking those

⁸ *Lord Bacon* observes that the ways and proceedings of God with spirits are not included in nature—that is, in the laws of heaven and earth—but are reserved to the law of His secret will and grace.—*Confession of Faith*.

acts for the agent himself, although it is no more than what is done by those who fall into the error to which I have alluded.

Indeed, one author of great renown,⁹ for whom I have a very high respect, goes so far as to contend that, if the soul ceases to think, it ceases to be; and he says that, if the soul ceases to think, nothing of it remains existing.¹ This is surely to reduce the soul to a mere act of the mind. It is at best but to confuse the action of the soul with the soul itself. Certain, also, it is, that thought brought into connexion with any substance, cannot constitute a soul in it; otherwise, our thinking about a book would at once render the book itself an intelligent being. It must be something more than thinking that resides in, or is annexed to the body, which forms the soul. An actual being which has the power of thinking, is necessary to constitute it. We can hardly, therefore, suppose that the whole essence of the soul consists in thought. Although incorporeal, it must be a reality. Though devoid of all gross matter, it must necessarily have a positive existence.

Indeed, although action is natural, and probably essential to the soul, and to every spirit, yet it is possible that even the soul itself may be sometimes in repose, and consequently inactive; and, when once inactive, it would, like matter, so continue unless and until some act occurred, either through its own spontaneous volition, or the operation upon it of some external cause, to excite it to action. And as both spirit and matter are capable alike of action and inaction, may not both be capable alike of intelligence and of the want of this? Possibly, too, as some material substances may be intelligent, certain spiritual beings may be void of this principle.

Moreover, it is surely as unreasonable, and as contrary to common sense, to say that thinking, or any other exertion, constitutes the actual essence, instead of being but the mere action of the soul; as it would be to assert that speaking constitutes the essence, instead of being the mere employment or effort of the orator.

The character of the operations effected by spiritual beings, I propose to consider in the present section; and from the nature of these operations to endeavour to draw such conclusions as to the character of the beings by whom they are performed, as the facts of which we are cognizant appear to warrant.

⁹ *Dr. Watts. Essays. Essay v. s. i. p. 116.*

¹ *Locke*, however, maintains that it is no more necessary for the soul always to think, than for the body always to move.—*Essay on Understanding*, b. ii. c. i. s. 10.

1. *Infinite Capacity of Spiritual Intelligence.*

The utmost that we really know concerning either the nature or the action of spiritual intelligences, is derived from the observation of our own minds. That, however, which is the nearest to us, which constitutes the essential part of our being, as I have already remarked, we are the least adapted for observing or comprehending. The knowledge which, of all others, is the most valuable for us to possess, is precisely that which we are in the smallest degree capable of acquiring.

From what we observe of our own minds, their capacity and activity, we are nevertheless able to form some estimate, inadequate though it be, of the infinite capacity of spiritual intelligences in general, which we may suppose to be far greater than those which our souls possess while united to and clogged by a material frame. It is, indeed, probably not too much to hazard a conjecture that our souls, when disengaged from gross matter, would be as superior in point of intellectuality to what they are in their present condition, as they now are in activity and vivacity to the material frames to which they are annexed. The only limits to their capacities are imposed by their annexation to those material frames. The extent of their powers, we can judge of by their independent action; the extent of their restraint, by the abridgment which we perceive them to be subjected to by the union in question.

Action appears, in many respects, to be the peculiar prerogative of spirit, as repose is that of matter.² The action of spirits is, however, not only constant (though probably not ceaseless), but varied, and is exerted in several different modes, corresponding with the operations they are desirous of effecting. Our only knowledge of these modes of action is derived to us from observation of the operations of our own souls, whose sphere of exertion is necessarily much limited by their union to a frame composed of matter, the natural bent and disposition of which is to resist action, and to obtain repose. Such, however, is the natural activity of spirit, that, even when joined to matter, its character is not only not subdued, but it communicates a portion of that character to matter itself.

We nevertheless know nothing of the operations of matter, except by their effects.³ So is it also as regards the operations of spiritual beings. In both cases we judge merely by the results. And, indeed, we know in reality as little of the essence of one

² *Locke*, nevertheless, held thinking to be merely the action, not the essence, of the soul.—*Essay on Understanding*, b. ii. c. xix. s. 4.

³ *Locke* asserts that "we have as clear a notion of the substance of spirit as we have of body."—*Essay on Understanding*, b. ii. c. xxiii. s. 5.

being as we do of that of the other. But we only become informed of the operations of spiritual beings from their effect upon matter, where the mutation and motion of the matter seem to reflect, as it were, the shadow of the being which acts upon it. To attempt, however, to judge of the extent of the operations, and the capacity for operation of spirit, from the constraints to which matter subjects it, is surely a very incorrect and inadequate mode of deciding on the general qualities and characteristics of such a being, and is, in fact, determining on its nature from the acts that it is compelled to do contrary to that nature. This is the case also with the actions of our own souls, which are most, if not all of them, more or less under material constraint, and very different to what their operations would be if free and disunited from the body. Probably the most correct notion of the nature of the action of spiritual beings is afforded by the observation of the conduct of our minds when engaged on some abstruse speculation quite independent of matter, when their freedom and activity and versatility are fully evinced, and on which occasions the material frame has the least influence either in controlling their exertion, or directing their course of action.

The entire, perfect, and unlimited freedom of a disembodied spirit, appears to be exquisitely portrayed in the 139th Psalm, where its wanderings and transitions from place to place, and from sphere to sphere, unrestrained by the incumbrance of matter, are sublimely described, in its vain attempt to escape from the Divine omniscience,—“If I ascend into Heaven, Thou art there. If I descend into Hell, Thou art there also. If I take the wings of the morning, and dwell in the uttermost parts of the sea, even there also shall Thy Spirit lead me, Thy right hand shall hold me.”⁴ The complete change in our organs of vision must alone effect an immense and entire alteration in our whole condition in a future state. But it may be inferred that in every other respect, the revolution in our nature and constitution will be as extensive. Probably in a state of separation, as also when united to a spiritual frame, the perfect liberty of action of the soul, and its capacity of instantaneously transporting itself from one place to another, may be analogous to its liberty of action in this respect during dreaming, when we appear to pass instantaneously and at pleasure, with the utmost rapidity and celerity, wherever our minds may impel us.

2. *Spiritual Activity.*

It is a grand maxim in the material world, that nature abhors

⁴ Verses 8, 9, 10.

a vacuum; that is, that there is no space in creation but what is occupied by some substance or other, be it earth, or fire, or air, or ether. A corresponding maxim might be advanced as regards the mental world, which is that there is no such thing as vacuity in the operation of the mind, which is almost always in action in some way or other, either as regards comparing ideas, or combining them, or receiving them anew, or communing over those already obtained, which is perhaps the nearest approach to quiescence that the soul ever experiences.⁵ Hence, while matter appears naturally ever in repose, mind appears naturally ever in action. A moving mountain is not more opposed to our notions of the economy of nature, than is a spirit which is immutable. Matter, however, never moves without some agent. Spirit never requires any agent to move it. Perpetual motion in matter only exists by the agency of God, who is a Spirit acting upon matter. Perpetual immotion in mind is not only inexperienced, but, as far as we can judge, is what never can be. The mind it is that causes all the voluntary motion that takes place in the matter of which our bodies are formed; but the matter which constitutes our bodies, can never repress the motion of our minds. Thinking is in reality, however, not the essence, but only the action, of the soul. It is to the soul what motion is to matter, and in this consists the operation of the mind.

The action of the soul, and of disembodied spirits, as regards the rapidity of their motion, and with which they may hold communication with distant beings and objects, may bear resemblance to what we see effected by electricity; or at least the latter may serve to illustrate the mode in which the former operates. It may, at any rate, be inferred that there are capacities corresponding in some of their attributes with this power of electricity, annexed to spirits, but of the precise quality of which we are wholly ignorant.⁶

But the action of the soul, so far as regards its transition from one place to another, either during dreaming or the exercise of the imagination, cannot for one moment be supposed to be real, or other than entirely supposititious. It is only the images of these scenes that are, as it were, reflected in the mind as in a mirror; and the soul itself is no more actually present in the places that it sees, than the objects reflected in a mirror are really there existent. If these scenes were physically

⁵ As remarked by Dr. Maudsley, "the existence of mind does not necessarily involve the activity of mind."—*Physiology and Pathology of the Mind*, p. 17.

⁶ Buffon remarks that "the mind forms, at pleasure, an intimate union with any object; neither distance, magnitude, nor figure can obstruct this union; when the mind wills it, it is effected in an instant."—*Natural History. Nature of Man*.

present to the soul when we thus dreamed or imagined them, we should in each case observe them in distant places as they actually are, and not merely as they appear to our recollection of them, drawn from the memory of what they once were, but may have long ceased to be. Besides which, persons are then frequently represented to us, not as they are now, but in all their youth and vigour, which they have since lost. Buildings and other objects which are no longer existing, are also on such occasions exhibited as still remaining. The freedom and activity of the soul during dreaming and imagining, may, however, not inaptly serve to represent to us its freedom of activity in a future state; just as dreaming often truly portrays real events, or a mirror the objects which it reflects.

Action is nevertheless, as already demonstrated, certainly not the essence, but merely the motion of the soul. Indeed, if it were not so, whenever the mind ceases to be in activity, the soul would cease to exist; and, moreover, cessation from action, although it be but momentary, is essential to the freedom of a self-acting being; and we have ample experience, and thereby positive proof, that the mind is fully capable of existing in this state, and of voluntarily entering into it. Farther than this, as action is not the essence, but merely the motion, of the soul, and as this action must be in many, if not in all, cases voluntary; it almost necessarily follows that the soul is able at times, it may be only momentarily, to cease from or suspend its action, which is indeed requisite to its power or control over itself and its operations. Of this power, and of having occasionally exerted it, most persons will probably be conscious. The action of the soul indeed nearly resembles the motion of a vessel at sea, which sometimes progresses forward, directing its own course; at other times it is impeded by the wind or the tide; and at others it is for a short period at rest, while even then it is heaved up and down by the motion of the elements around it. What might be called the anchor of the soul, is some object on which it may be steadily fixed for the time; although at such a time, like a ship at sea, it will be constantly agitated by the billows that beset it.

The true and correct principle as to the ceaseless action of the mind, I therefore conclude, on the whole, to be as follows: The mind is not always necessarily active and changing its operations, but it is always conscious, and never ceases from thinking. Its activity is occasionally suspended, although but momentarily; its consciousness never, even for a single instant. When it suspends its action, it still continues its consciousness.⁷

⁷ Dr. Maudsley remarks that "the most important part of mental action, the essential process on which thinking depends, is unconscious mental activity."—*Physiology and Pathology of the Mind*, p. 20.

3. *Spirits Exempt from Material Restraint.*

As all actual corporeal pleasure and pain, even in this life, are produced, not in the soul, but in the body; so it is not unreasonable to suppose that the soul in a state of separation from the body, will not be subject to either corporeal pleasure or pain. To all those emotions and affections, however, which arise or are produced in the soul, and above all to the stings of conscience, it must be as entirely subject in a separate state as when united to the body.⁸ We are told, nevertheless, that, before the period of eternal bliss or eternal condemnation and punishment, souls will be reunited to bodies; and we shall thus be made fully capable of experiencing corporeal pleasure and pain.

Whether the particular acts respectively performed by the soul and by the body, when in a state of union, will be rewarded and punished separately in each, may be a matter of doubt. It may be remarked, however, that even in the present world, the acts of the mind are oftentimes rewarded by mental pleasures or mental pains, according to their quality; and those of the body by physical pleasures or pains. In this life, nevertheless, the body is that which mainly suffers by disease and pain, for the errors of the whole man.

Felicity in a future state will, it appears probable, principally and essentially consist in having every desire by which we are actuated, thoroughly purified and made capable of gratification through the soul alone, which will not then require the excitement or aid of the bodily organs in order to attain this end, and may be satiated to the full, according to the will of the person so moved. Thus, our desire of union with any person, on which, as I shall hereafter show,⁹ the passion of love is founded, will be indulged by a spiritual and real, and not by a mere corporeal and gross, junction; while the sublimest and most delightful, as well as most complete, of all unions—the union of the soul with the Deity through love for Him the most intense—will then be attained. Moreover, as all our appetites and passions and affections are excited and exist really in the soul, and not in the body; so by the excitement of the soul alone will they be gratified, and to the full.

I should further infer that the essential characteristic

⁸ *Sir Humphry Davy* suggests, in one of his Dialogues, that "it is a law of Divine Wisdom that no spirit carries with it into another state and being any habit or mental qualities except those which may be connected with its new wants or enjoyments."—*Consolations in Travel*, p. 52.

⁹ *Vide post*, book i. c. iv. s. 4.

feature of celestial pleasures will be their abstract, and consequently refined and pure nature. They will exist and be excited by themselves, independently of the gross material causes and objects of them in which they at present originate. The plenitude of the enjoyment will be felt, without the corrupt and sensual indulgence, the desire of which occasioned it to arise. Thus might we ever in a rapturous succession of exhilarating vibrations, experience the ecstasy springing from the gratification of emotion or appetite, without reference to the material organs or actions through which they are now satisfied. All the splendours of scenic enchantment we may also witness, without the necessity of the eye; the most seraphic tones may enter into the soul independent of the ear; and the highest enjoyments of the taste may be partaken of without the aid of the palate. Not only the most varied and interesting forms, but probably colours and hues and tints of surpassing intensity and brilliancy and splendour, will then be presented to us, corresponding with, but much excelling, the glories which we already behold in the celestial bodies, and accordant with the description contained in the Apocalypse of the transcendent magnificence of the world to come.

In a future state of bliss, and which will mainly contribute to the ecstasy of its delights, we shall completely, and without fatigue or satiety, enjoy to the full all the varied and combined pleasures that eye and ear and feeling and taste can afford, without resorting to the material exercise of those senses.

Not improbably, indeed, the seraphic harmony of heaven, which we are told is ceaselessly progressing, and in which all its inhabitants unite, does not consist of actual music or singing; but this constitutes, or rather typifies, the mode of intercommunion, and of expressing their thoughts exercised by the ecstatic and beatific beings who dwell there, and which is highly reflective and expressive of the raptures with which they are ever filled. Hence, although we of the Christian religion, while entertaining the highest and indeed the most sublime expectations as to the nature and extent of celestial pleasures, may not be led to suppose that we shall derive them from the presence of groves, and fountains, and fruits, and fragrant flowers; yet, on the other hand, we may believe that the joys, mental, moral and physical, which will be then called forth, will in many essential respects correspond with those which such objects occasion; and that the emotions and desires which move us now, will—so far as they are capable of existence or excitement in a future condition, and modified as they may then be, whether by their purity or refinement, in order to adapt them to that state—be those, from whatever objects or causes arising, that will then be produced.

But even in the present gratification of the appetites of each kind, the soul really partakes of as much enjoyment as does the body ; not, indeed, by immediate excitement, but by indirect impulse, arising from the sympathy which exists between the body and the soul. In addition to which it should ever be borne in mind, that all pleasure actually resides, and is essentially and ultimately experienced in the soul, and not in the body. It is surely, therefore, not unreasonable to suppose that the soul, when separated from the body, will be still capable of pleasure ; and that even the very same pleasures which were excited in it through the body, may be excited by some other bodies or organs quite as extensively, although these bodies or organs may differ much and materially from those which we now possess. Possibly, indeed, as in the case of pleasure arising from the memory of past gratification, this feeling will be produced by the soul's own voluntary action. Not improbably, moreover, as the pleasures of Heaven may to a large extent consist in the spiritual gratification of every desire of the soul ; so the torments of Hell may, to a corresponding extent, consist in the vehement and constant excitement of emotions and desires of different kinds, and those of the most exquisitely irritative nature,¹⁰ but without the power of ever being able either to gratify or appease them.

The soul of itself is never liable to fatigue, and requires no rest from exertion. The organs of the body, through which the soul performs certain of its operations, are indeed subject to fatigue, which is frequently mistaken for that of the soul. But even in those cases where we experience weariness after mental labour, this is generally owing much more to some excitement or flurry attendant upon our pursuit, than to the actual over-exertion even of the mental organs.

As in most of our intellectual operations, certain bodily organs are either directly or indirectly made use of and called into exercise, which very soon experience fatigue ; so we are oftentimes led to suppose that the soul itself is liable to become fatigued by exertion. In many cases of this sort, organs of the body, although not directly availed of, are nevertheless indirectly exerted to a very great extent. Thus, during reasoning, when we refer to figures or writing for *data*, which is almost always the case, the corporeal senses and organs are at once resorted to. So is it also in exercises of the imagination. During the process of receiving ideas of any kind, the corporeal organs are, in nearly every instance, exerted.

Where, moreover, the material organs are not immediately exercised in conducting the intellectual process in operation, yet even then the conduct of this process so engrosses the whole

¹⁰ *Vide post*, book i. c. ii. s. 3.

mind, that the common and necessary actions of these organs are neglected or suffered to go wrong; and thus in another, although not less important mode, the body is affected by the activity of the soul, and the fatigue of the former becomes eventually a clog upon the latter.

There may, nevertheless, be some few intellectual acts,—as in the case of simply thinking over past common occurrences, which is effected without trouble, and causes no excitement,—in which no material organ is called into exercise, or affected by it. But this is very rarely the case; so intimate is the union between our mental and material beings, that the slightest affection of any kind experienced by either of them, vibrates at once to the other. It is, however, evident that the soul itself is never weary of action. Even in the case of the senses, it is not their action that fatigues or oppresses them, but the constraint of them to perform some special act. The eye is ceaselessly being exerted in gazing on different objects while we are awake, which, however, produces no oppression of that organ; but if we constrain it to fix its attention for a long period on some particular object, as when we are engaged in reading a book, or making a drawing, the organ soon experiences fatigue.

We may infer that in a future state of being—when the soul is separated from the material frame, or clothed with a spiritualized body, which will offer no restraint to any of its operations,—the mere act of willing will be equivalent to doing, alike as regards locomotion and action. The simple effort of the soul will at once accomplish the deed. This, too, it may be concluded, is ever the case with the Deity, with whom to will is to perform, and who is alike at once omnipotent, omniscient, omnipresent, and omniexistent.¹

Moreover, in eternity, or during a separate state of the soul, what are now considered but the creations and the wanderings of the imagination, will be turned into actual realities. There being probably but few material objects with which we shall be engaged, the ideas of the mind will remain the chief subject to which its attention will be called, as is now the case during dreaming. These imaginings will then become real existences, or, rather, such of them as are not real, will for ever cease and be obliterated; and such as are real, will for ever remain present, never more to be effaced from the mind. Eternity will be a never-waking dream; but this dream will be one in which correct

¹ *Sir Isaac Newton* lays it down that as the supreme God exists necessarily, and by the same necessity He is always and everywhere, “so also He is wholly similar, all eye, all ear, all brain, all the power of perceiving, understanding, and acting; but after a manner not at all corporeal, after a manner not like that of man, after a manner wholly to us unknown.”—*Newton's Principia, Scholium generale.*

images only are present to the soul's vision. External material ideas are now the proper objects of the senses; but internal imaginations and cogitations are the proper objects of the mind. While the former are corruptible and perishing—like the senses and the objects of them—the latter are eternal and never-ceasing, like the soul and the objects of its contemplation.

Whether souls in a separate state see or hold communion with material objects, as we see and hold communion with them, may be a matter of doubt; but I should imagine that they would perceive them at once, or, rather, take cognizance of them through their essential qualities, and not see them as we do.² When the soul is united to a spiritualized body, it is probable that we shall be able, in addition, to see material objects as we now do, as it is even now the soul which sees, although it sees through the body;³ and also in dreaming we are more or less influenced by the sensation of material objects around us. Besides which, our newly-raised bodies will be material as well as spiritual. The ideas of the imagination, which are now almost obscured by the greater vividness of those of the senses, will then be the most powerful. The planets which are at present dimmed by the glare of the sun, when that is withdrawn, will shine in all their lustre, and exhibit all their glory.

This separate condition of the soul—or its union to a spiritualized body or frame—as regards its active operations and enterprises, will probably be the exact counterpart of that in which we now exist. Intellectual exercises will then form our chief occupation, as material avocations now do. Intellectual qualities will then be deemed as superior in importance to those which are physical, as physical are now generally considered to be above those that are intellectual; and the pursuit of mere pleasure, and of sensual delights, will then be regarded as trivial in comparison with intellectual attainments and enjoyments, as intellectual attainments and enjoyments are now by the generality when compared with the possession of wealth, or the gratification of the senses.

Not improbably, moreover, the intercourse of the soul with Earth during its separate state, may be somewhat analogous to, and correspondent with, its intercourse with Heaven during its present condition, which it obtains occasionally in dreams and visions for brief periods, and at long intervals.

² *Locke* suggests that separate spirits may have as clear ideas of the radical constitution of substances as we have of a triangle, and so perceive how all their properties and operations flow from thence.—*Essay on Understanding*, book iii. c. xi. s. 23.

³ In the opinion of *Locke*, spirits may be able so to frame to themselves organs of sensation or perception as to suit their present design, and the object they would consider.—*Essay on Understanding*, book ii. c. xxiii. s. 13.

The familiar occurrence of dreaming affords, indeed, both a proof and an illustration that the soul may act independent of the body; that when the body is inert and torpid, the soul may exert itself with the utmost vigour; and that the period of almost entire inactivity of the body, is that of the greatest activity of the soul.

But if the soul is thus active during the torpidity of the body through sleep, is there any difficulty in supposing that it may be also active during the torpidity of the body through death? If death terminated its activity, surely sleep would greatly check it. But as sleep does not check it, we can hardly suppose that death will terminate it.

4. *Intercourse between Spirits.*

As has been attempted to be shown, the soul can perform many of its most important operations wholly independent of the body, although so intimately united to it. The inquiry will therefore next be suggested, Can the soul receive impressions from, or hold communication with, any beings independent of, and without the medium of, the corporeal organs? Upon examination of many of its actions, it will appear that it is able to do this, not only when the body is torpid, but also when the latter is in full activity and life.⁴ In visions, when the souls of men have doubtless been visited by spiritual beings, the ideas of these beings, and the intelligence they communicated, have been conveyed to the soul directly from such beings, without the intervention or agency of the sensual organs of the body. Also, when the agency of the Holy Spirit, or of the spirit of darkness, has been exerted upon the soul of any individual, as doubtless it has oftentimes been upon those of many persons, its impressions have been received by the souls of such persons independent of the bodily organs or senses. Consequently, the evidence that we have of the soul not only acting at particular times independent of the body, but also obtaining impressions and ideas independent of the bodily organs, is as well established as, and is indeed identified with, Revelation itself. On certain ideas being forcibly recalled by the memory into the mind, this has on some occasions produced so powerful an effect upon it, that the impression has resembled one newly received, and has as such been communicated to, or acted upon, the organs of the brain. Hence, as it was obvious, from the circumstances of the case, that these ideas

⁴ *Lord Bacon* refers to the transmission of spirits between the teacher and the person learning.—*Nat. Hist.* c. iii.

were not received through the senses, spectral illusion, or the belief that the actual object, the ideas of which were in the mind, was present, has in this case prevailed. So also certain delirious and involuntary motion or excitement of the material organs, has produced illusions of the senses, more especially of those of sight and hearing. The senses are given us to enable us to hold communication with material and terrestrial beings; but it does not therefore follow that the possession of them should incapacitate us from holding communication with spiritual beings, although we are not able through them to carry on such intercourse. Consequently, although the senses are incapable of receiving impressions from these latter beings, yet the soul may hold communion with them independent of the bodily organs.⁵ This serves to prove it adapted for a spiritual existence among beings of its own nature; and we may further infer from thence that it is destined for another state of endurance.

It has been supposed by some persons who have attended the dying hours of certain individuals, that they have been in actual communication with departed spirits before their own took flight, and that they have talked of such intercourse during these moments. This is not at all inconsistent with what may be concluded to be correct and suitable notions of spiritual beings; for although the impressions received from them were not conveyed through the senses to the mind, but directly to the soul, yet, when so received, it may reason about them, and act on the material organs with regard to them, in the same way as though the ideas of them had been communicated in the manner in which those of terrestrial subjects are accustomed to be. The cases alluded to may not impossibly be instances of the soul being permitted, before its actual separation from the body, to hold commune with the beings of the world into which it is about to enter, and thus for these few moments to have converse with both worlds; a circumstance in itself not at variance either with the inference of reason, or the records of Revelation. The latter, indeed, affords us a similar instance in the case of St. Stephen. The opinion has been, moreover, long entertained, and is supported by the concurring testimony of ancient writers, medical practitioners, and accurate observers of nature, that the soul, shortly before

⁵ *Lord Bacon's* "experiments touching the emission of immaterial virtues from the minds and spirits of man, either by affections or imaginations, or by other impressions" (*Nat. Hist.* cent. 10), may be referred to here, where he asserts that "it is agreeable to reason that there are at the least some light effluxions from spirit to spirit, when men are in presence one with another, as well as from body to body" (941). He alludes also to the *oculus malus*, and to fascination, and "the percussion of the envious eye" (944).

it takes its departure from the body, is occasionally allowed to hold intercourse of the nature here described.⁶

In a future state of being, when we shall be principally conversant with spiritual objects, and when the soul will receive her impressions and ideas either immediately, or through the organs of a spiritual body; we may suppose that the communication between different intelligent beings will be immediate and direct,⁷ in the same manner as by sight we instantaneously appear to gain a knowledge of a prospect before us. We shall then carry on converse at will with other souls, just as readily as we can now bring our minds into apparent intercourse with them by thinking about them; and the arbitrary invention of words will be no longer necessary as the medium of such intercourse, the transmission of which will be effected through mental action. We shall then also at pleasure examine and discuss the thoughts and sentiments of the illustrious men of old, whether prophets, philosophers, or poets, as freely and readily, by communication with their minds, as we now do by having recourse to their works.⁸

5. *Intelligence and Language of Spirits.*

One of the most interesting subjects of psychological inquiry, is as to the precise nature of the intelligence possessed by spiritual beings, and the kind of language made use of by them for the interchange of ideas one with another.

As regards the nature of their intelligence, the vast extent of which we have already discussed, it may be inferred that, in reference to the varied intellectual powers possessed by man, they enjoy all these endowments in common with him. Whether they have any beyond these, it is difficult to determine. But as far as our knowledge and our reason serve us to solve this very difficult problem, there seems to be no ground for supposing that any faculties of a new order distinct from those of man are conferred upon spiritual beings, or upon man himself in a future state.

Spirits, I conceive, receive ideas in two ways: either by immediate communication with other spirits, without the inter-

⁶ See also on this subject *Essays and Orations* by the late Sir H. Hallford, Bart., President of the College of Physicians, p. 81; the account of the death of Louis XVII. in *Louis XVII., sa vie, son agonie, son mort, &c.* Par M. A. de Beauchesne, Paris, 1852; and the account of the death of Jacob Behmen, in the *Memoir of Behmen* by Okeley, 1780, p. 23.

⁷ Malebranche suggests that in a future state of existence we shall communicate our thoughts by the intimate union of ourselves, as the angels may do in heaven.—*Search after Truth*, pt. ii. b. iii. c. i.

⁸ Lord Bacon alludes, apparently with approbation, to the notion of there being transmissions and operations from spirit to spirit, without the mediation of the senses.—*Advancement of Learning*, b. ii.

vention of material organs, which are only necessary to carry on intercourse with a material world; and by reflection, or by recalling ideas already communicated. Whether, and to what extent, and in what mode, they obtain ideas and impressions from material objects generally, seems to be a question of doubt. Sensations and ideas of objects in nature indeed, if received by the soul in a separate state, or when joined to a spiritual body, would be perceived, not by the colours produced by the rays of the sun lighting upon them, but as they appear in their real nature and essence;—not as they merely seem, but as they actually are. And this probably will be true of our mental and metaphysical, as well as our material perceptions. As one great peculiarity in our condition and constitution in a future state will be the circumstance of our imbibing ideas of all around us, and respecting the beings about us, directly and immediately, and without the slow process of the operation of the senses; so it may also be inferred that our communications one with another, above all with the Great Being who is our Author and our Ruler, will be immediate and constant, and will be effected with the celerity, ease, and completeness with which thought and vision are now carried on. A large portion of the enjoyment of celestial creatures, probably arises from their exalted and perfect condition in this respect.

If it appears difficult to imagine in what manner the soul, when separate from the body, and in an independent condition, can exercise itself about different subjects, especially those which have relation to matter, and without the aid of the bodily organs; I would suggest that there really appears less difficulty in this supposition, than in the belief that it is able so to exercise itself when united to the body, especially in those cases where, while the soul is in full activity, traversing from one exalted topic to another, as though flying from sphere to sphere and through all the regions of space, the body remains in the same place, not even perhaps changing its posture.

Although different ideas may cause various emotions in spirits, as they do in us, yet there appears no ground to suppose that the quality or condition of a spirit is actually changed by these emotions, any more than our own state is changed by any emotion or passion which excites us. Indeed, as we derive many of the strongest emotions and passions through the body, we appear more liable than pure spirits can be supposed to be, to perturbations of this kind.

Another power which we may then expect to possess, which is not indeed a new faculty, but one of which we are now deprived by the grossness of our senses, and the imperfection of our organs—in addition to that already referred to, of perceiving and thereby ascertaining the quality of objects and substances according to their real nature and essence, and not

merely judging of them from their secondary properties as we at present do—is that of an endowment whereby all objects, however minute, will then be perfectly perceived by us, as it is in consequence only of the imperfection of our bodily senses and organs that we are now unable completely to survey them.

The Almighty, who conferred the power of vision on animated beings, is able at a glance to see all things, great and small, with equal ease and equal clearness. His ken can comprehend at once the most majestic planet, or the minutest plant. It may be inferred that, in a future state, our powers of vision, or rather of perception, may be constituted in a manner corresponding with our mental faculties for obtaining knowledge; so that greatness and smallness, distance and nearness, will occasion no difference as to the capacity and completeness with which we survey any objects to which our attention is directed.

VII. UNION OF SOUL TO MATERIAL SUBSTANCE.

ONE of those great mysteries, of the existence of which each person may be said to have experience in his own being and constitution, but which no one is able to solve or to explain, is that of the union of a spiritual and intelligent, if not absolutely immaterial, substance—such as we believe the soul to be—with a being that is material, and corporeal, and gross, and is itself devoid of all intelligence, such as is the body or material frame of man.⁹ All that we know is the fact of the reality and the completeness of this union. In what manner it is effected or subsists, we must ever remain in ignorance; and even conjecture can do but little to unfold the enigma.

If, however, spirit can in any way act upon, or be influenced by matter, it must reasonably be inferred that spirit may in some way be united to matter. Indeed, the very fact of spirit acting upon matter, implies to a large extent, if not necessarily, its capacity of being united to it; inasmuch as it is impossible for one being to act directly upon another, without in some way or other coming in contact or connexion with it. Even in the case of the sun acting upon terrestrial objects, a direct communication between the two is formed by the rays which pass from, and connect the one, to and with the other. It may be difficult, indeed, to point out the precise mode in which spirit is united to matter; but it is no less difficult to denote the

⁹ *Dr H. More*, however, held that the very nature of a soul is to have an aptitude of vital union with matter (*Letter 7, Life by Ward*, p. 291). He says, also, that he suspects it scarce ever is wholly disunited from it, but hath either a body of light, or of air, or some vaporous or such like consistency, all which are truly matter as the earth, though finer and purer.—*Ibid.*

precise mode in which spirit acts upon matter. And if the difficulty in one case does not disprove the fact, so neither can it be allowed to do so in the other.

The conjunction between spirit and matter, must have taken place at the creation of the universe, when a spiritual being in the person of the Almighty exerted itself in the original formation, and the disposition of matter, and that of various kinds.¹ But the capacity of one substance to act upon another substance, seems almost necessarily to imply some community of essence between the two, and some approximation of qualities belonging to both. An entirely gross substance, and an absolutely immaterial being, could not possibly act upon each other. The substances apparently most allied to immateriality, with which we are acquainted, that act directly upon gross matter, are certain invisible gases, and air, and light, and the wind. But each of these substances, although not seen, may be felt, and possesses certain of the properties even of gross matter.

In the case, moreover, of the different kinds of matter, it is not those that are most nearly allied which most readily and completely unite and amalgamate one with another; but those whose elements and properties are of such a nature that they especially adapt them for such union, and for acting upon and influencing each other. Thus, although oil and water refuse to unite; water and earth, and water and salt, will readily do so. A difference and even contrariety in their nature affords, therefore, no reason for concluding that matter and spirit can never be united and blended together, and reciprocally influence each other.²

Man, as already observed,³ passes through four distinct and successive stages of existence. He is first inanimate and inactive, as when he exists in the seed. His second stage is vegetable, being that of the foetus. His third is animal, being that of infancy, before he acquires intelligence. And his fourth is rational, when, arriving at maturity, his faculties are developed.

So in the case of the butterfly. Vitality of some kind, and instinctive being also, exist in the egg, the caterpillar, and the chrysalis, as much as in the butterfly, although in two of these states they are dormant or undeveloped. But they are nevertheless existent, and equally so as in the other states.

¹ *Sir Isaac Newton* observes, in relation to this subject, that "God suffers nothing from the motions of bodies, nor do they suffer any resistance from the omnipresence of God."—*Newton's Principia, Schol. gen.*

² According to *Des Cartes*, nothing acts upon the mind more immediately than the body to which it is joined; whence what is passion in the mind is action in the body.—*Passions of the Mind.*

³ *Vide ante*, s. ii. a. 2, p. 30; s. iii. p. 47.

During each of the several stages of existence referred to in the case of man, the soul, although the organs through which it acts are not then developed, is united to the material frame. It is as completely so in infancy as in maturity; and as fully in the fœtus as in the infant, and in the semen as in the fœtus.⁴

1. *Fusion of Soul and Body into one Being.*

Wonderful, and even apparently at variance with the ordinary operations of nature, and contrary to much that we have observed of those operations, as may be the action of spirit upon matter, if not still more so the union of spirit to matter; the actual and complete fusion of these two opposite principles into one being, organized, animate, and active, and whose several functions, both physical and intellectual, are carried on effectively and harmoniously, is calculated yet more to excite alike our astonishment and our admiration. Nevertheless, by the union of the soul to the material frame, two beings seemingly the most entirely opposite to one another, are brought together and blended into one.

This union and reciprocity of action between the soul and the body, which is exhibited in the case of each human being, is perhaps best illustrated by the exercise of speech. Thus, as regards the influence communicated by the soul to the body, we see this exerted when the thoughts and feelings which originate in the soul are impressed upon the body, and through the material organs used in speech conveyed to other persons. When, on the other hand, this influence is communicated by the body to the soul, the ideas of external objects represented by language are received by the bodily organs, and are conveyed to the soul.

When the soul is duly regulated and free from perturbation, and the body is in perfect health and order, so that both soul and body act in due harmony together; then does the whole man, both soul and body conjoined, seem to be indissolubly united and blended together, and the two beings act in unison,

⁴ *Willis* remarks, with regard to the first beginning or original of the corporeal soul, that it exists before the body, because certain animal spirits, or very subtle atoms, as it were a little soul not yet enkindled, lies hid in the seminal humour, which is at length enkindled from the soul of the parent, as a flame from a flame, and begins to unfold itself before the foundation of the body is laid, and daily increases and grows into an animal.—*Souls of Brutes. Dispositions of Soul*, c. v. p. 29. (*Porridge's Trans.*)

According to this writer the soul is created immediately by God, and communicated to the child in the womb as soon as all things are rightly disposed for its reception as regards the formation of the child.—*Works.*

as one. In a perfectly constituted human frame, there should be the same accordance between the operations of the body and of the soul, as there is between the animal impulses and the motions of the limbs, and between the sensitive organs and the actions which immediately result from them. The slightest irregularity or disorder of either of the beings in question has, however, the effect of more or less tending to dissolve or weaken this union. Thus, any injury to the brain, which is the material organ, and probably also the seat of the soul, causes disarrangement of the mental action, and seems to loosen the connexion between the soul and the body.

Moreover, the condition of the mind and that of the body, mutually and very extensively and unceasingly influence each other. Not only do a perturbed mind and the apprehension of evil, disorder the body, but the disorder of the body in its turn affects the mind; and that not merely by lowering the animal spirits or depressing the nervous feelings, but it actually leads the mind to a course of ideas of a melancholy nature, and to entertain forebodings of that character. Thus, the course of a thunder-cloud which is wafted through the air, may not only throw into deep shade many objects in nature which were joyously basking in the sun; but may also darken the reflections of the mind, and cast for a time into gloom those felicitous hopes in which the soul had been indulging.

In many ways the body has an influence on the soul, on its actions and its condition, corresponding with that which the material world around it has on the body. The latter is affected in several important respects by the state of things about it, by the variations of temperature, and the condition of the atmosphere; but it is never so changed in its nature as to lose its own individual particular character. Just so is it with the soul, which is often, and indeed always more or less, affected by the changes and the peculiar condition of the body, but is never actually altered in its individual character or nature.

We experience the influence which the body has over the soul, and how extensively this is exerted to propagate error, when the body becomes diseased, or when it is under the influence of intoxicating liquor, at which time the very images created by the senses are distorted and perverted. This error more or less prevails at all times, although at these periods it is rendered peculiarly obvious. It is probably difficult to say whether diseases of the body proceed more from the soul, or diseases of the soul from the body. But as the soul is an active, and the body merely a passive being; we may infer that the influence of the soul on the body will be always far more powerful and extensive, than that of the body on the soul.

The mind, as already observed, is never of itself liable to

actual fatigue.⁵ What is ordinarily termed and believed to be fatigue of the mind, arises from the exhaustion of the mental bodily organs, as is the case after long study, when the brain is overworked, and the whole physical frame is tired. But weariness of the mind, as distinct from fatigue, and altogether independent of the bodily organs, also arises when the mind has been long intently engaged on one abstruse subject.

When a soul is united to a particular body, it is reasonable to suppose that that soul can only obtain ideas and sensations of external material objects through the organs of such body with which these material objects communicate.⁶ The soul is thus in a mysterious manner blended with that body, and so partakes of its affections; although the soul is unaffected by any motions of other bodies not communicating with the body to which it is joined. The connexion between mind and matter is, indeed, nowhere more fully illustrated than in the case of the senses, which, being fitted to receive sensations from all external objects, form, on the one hand, a medium of intercourse from matter and the external world to the soul; and being capable of receiving, on the other hand, through the nervous ether or fluid, the impressions of the mind in an immediate manner, form thus a medium of intercourse from the soul to matter and the external world. Hence they may be aptly said to constitute the medium of communication between mind and matter.

Even during the process of sensation, we perceive a great difference between the impression made by the object on the senses, and the operation of the mind consequent on that impression when it takes notice of the subject, and exerts itself respecting it. The one is the affection of the material organ which is communicated to the mind; the other is the action of the mind itself independent of that organ.

The immediate intrinsic advantage which the soul derives from its union with the body, as regards its knowledge of matter, consists, probably, in obtaining an actual acquaintance with subjects of this kind, while souls not so united would only acquire this knowledge from information through others; just as a man who has visited a particular place obtains a superior knowledge of it to one who has gained his information about it from hearing of it through different persons, or reading about it. Even the Almighty Himself condescended to ally His Divine Spirit with a mortal material frame, by which He obtained a close and

⁵ *Priestley*, however, contends that the mind is as much fatigued with thinking as the body is with walking.—*Disquisition on Matter and Spirit*, p. 128.

⁶ According to *Des Cartes*, the soul does not perceive in so far as it is in each member of the body, but only in so far as it is in the brain.—*Princ. Phil.* part iv. art. 196.

practical acquaintance with the nature and operations of the material universe. It therefore appears to me not unreasonable to suppose that the soul's being joined to a material frame may be mainly for the sake of enabling it to receive ideas of material objects, which it could not so well do if it existed by itself, requiring, as it must do, the intervention of some substance qualified for such an end, on which to act for this purpose. Such, in our present condition, may we suppose the brain and the senses to be, which, as I have recently remarked, form a medium of communication between spirit on the one hand, and matter on the other.

2. *Mutuality of Intercourse.*

Not less certain, or less capable of observation and demonstration, than the union itself between the soul and the body, is the mode in which intercourse is carried on and maintained between these two beings, so different and indeed opposite in their nature and characteristics, and in all respects; between which, however, intercourse is exerted with that wonderful, and indeed complete harmony and regularity, necessary to constitute a perfect fusion of two beings into one.⁷

It has, nevertheless, been contended that matter cannot affect the soul, even when the two are united, as matter is essentially inert and inactive. But matter, although it may be naturally inactive, is not incapable of action; and although it cannot move itself, it may be moved by other matter; besides which, the soul is capable in many ways of being affected by passive as well as active matter. We are repelled in our progress equally by a stone which is standing still, as by one that is in motion.

Different substances appear, indeed, to vary extensively from each other as regards their capacity for being the organs of spiritual operation; as the brain, which is probably especially and essentially adapted for this purpose, from the stomach, whose capacities and functions are of an entirely opposite kind. But if various substances so differ as regards their capacity for being the organ of spirit, may they not correspondingly differ also as regards their capacity for spiritual endowment?

The mode in which the soul is affected, as in the case of depression already alluded to,⁸ by the condition of the material frame, proves at once the close connexion, and the intimate

⁷ Some interesting and valuable observations on the reciprocal influence of the soul and body will be found in *Aristotle's Treatise on Physiognomy*.

⁸ *Vide ante*, s. ii. a. 4, pp. 38, 39.

mutuality of intercourse which subsist between these two beings; as also that the two, although thus united, are nevertheless distinct and independent. They both indeed constitute one man, but they are separate beings, in reality as distinct from each other as are two different men.

The action of the soul while united to the body, is exerted, and may be observed in three different and distinct modes:—1. When it acts upon and in unison with the body. 2. When it acts independent of the body. 3. When its connexion with the body is broken or disturbed, and it acts irregularly and without harmony upon it. The first happens in the general course of waking action, when the body is in a healthful state. The second happens during sleep, and in cases of delirium, when the soul seems to act quite uncontrolled by, and independent of the body.⁹ The third takes place in cases of insanity, or when the brain is injured, whereby its powers as the organ of the soul are destroyed or impeded.¹ We may also, I think, perceive this kind of intermediate state to exist in some peculiar instances, as, for example, during that period which elapses between our being wide awake and our falling to sleep (when the second of these conditions exists), and at which time the soul is neither entirely unhinged or disengaged from the body, so that it can act freely and independently as it does during sleep; nor does it retain sufficient hold or influence over the corporeal organs of the soul, so as to enable it to act with due regularity and effect upon them. In consequence of our being at this period in this state, it is that such incongruous and wild ideas are then apt to be generated.

The several modes in which this mutual intercourse between the soul and the body is exerted and carried on, will be adverted to in the different books of this treatise, more particularly when considering the subjects of the senses, emotions, appetites, and passions;² the concurrent impulses both of soul and body conducing to the development of natural disposition;³ as also the operations of the intellectual faculties of different kinds;⁴ and especially the reciprocal influence between the various medial, mental, and moral endowments.⁵

3. *Development and Organ of the Soul.*

The topics discussed in the preceding portions of the present section, lead naturally, and indeed necessarily, to the inquiry

⁹ *Vide post*, s. viii. art. 2, 4.

² Book i. c. i. ii. iii. iv.

⁴ Book iii. c. ii. iii. iv. v.

¹ *Vide post*, s. viii. art. 4.

³ Book ii. c. i.

⁵ Book iii. c. vi.

as to the precise mode, so far as we can discover it, in which the soul, when united to the material frame, becomes developed in that frame;⁶ and also as to the particular part or member of such frame which may be reasonably regarded as the special organ of the spiritual and intellectual being that is annexed to it, and through which it is able to perform its various and exalted functions.

The brain has been almost universally concluded to be the seat of the soul; and that part of the brain which is denominated the pineal gland, has been asserted to be the exact spot where the soul is situate.⁷ To this point also the animal spirits are said to flow. The different organs of the senses all communicate with this gland.

That the brain is that part of the body which is the organ of intelligence, is from many facts to be inferred. Any affection of this member of our system, produces a corresponding affection on the intellectual operations. The brain, moreover, from being the most refined, and subtle, and nervous portion of the material frame, is apparently the best adapted for an active intellectual organ. In the case of plants, the root appears to supply the place both of brain and heart, which latter is believed by many to be the seat of life in animals.

It seems probable that the brain, which is supposed to be the organ as well as the seat of the soul, is in a certain measure peculiarly adapted in each individual, according to the particular character of his soul, for the operation of its faculties. And we certainly do find that men's intellectual characters do conform very much with the general shape of the brain, and the expression of their countenance. Intellectual cultivation, indeed, it is which, as already observed, mainly contributes to mark

⁶ Nevertheless, as remarked by *Origen*, the mind or soul itself does not increase at the same time with the body.—*Opera*, vol. i. p. 766.

⁷ *Plato* places the soul in the head. But in some of his discourses he appears to consider the whole body to be the residence of the soul, which was also the case with *Democritus*.

Diogenes, *Apoloniates*, *Hippocrates*, and *Ausonius* placed the soul in the heart.

According, also, to *Plutarch*, some have regarded the heart as the seat of the soul; others the pericardium.

According to *Des Cartes*, the chief functions of the soul are exercised in the pineal gland of the brain.—*Passions of the Mind*.

And yet *Des Cartes*, in another part of the same work, asserts that the mind is united to all parts of the body, and not to any one part exclusively, inasmuch as it is single and indivisible, and has neither extension nor dimension.

See also note on this subject from *Willis*, *ante*, s. ii. art. 4, p. 38.

Behmen says that the blood is the house of the soul. The tincture is its body (*Questions of the Soul Answered*, a. 7). In another passage in the same work *Behmen* asserts that the soul has its seat in the blood of the heart.

the features, and to fix an individual and characteristic stamp upon them.

Nor is there anything unnatural or unreasonable in the supposition that the organs of the brain are moulded and influenced in their growth by the soul;⁸ inasmuch as we often see that when the mind is by any cause strongly excited, an immediate and powerful effect is at once produced by this circumstance on the material frame. The expression of the countenance is also a certain index at all times of the changes and particular condition of the mind. If, therefore, any affection of the mind at mature age thus causes a change in the body, it is doubtless not difficult to suppose that, when the texture of the intellectual organs is pliable, and susceptible of every impression, and they are capable of some training and direction being given to them (as they are during their growth from infancy to maturity), the brain should be liable to be operated on and moulded according to the disposition of the soul which is united to it, and by whose influence all its willing actions are directed and regulated. And if any part of the body may be so affected, a foetus in the womb must be also subject to this influence.⁹ Hence, both the soul of the parent of the child, and that of the child himself, essentially influence the formation and development of his material frame and its organs. Thus do we see the countenance, by its expression and character, surely indicating the real disposition, nature, and temper of the soul.

That the brain, like every other natural organized being or frame, has a perfection of form, towards which each individual of the species approaches more or less, and according to which its excellence as such depends, it is but reasonable to suppose; and according as the brain, which is the organ of the mind, is proportionably well-shaped and developed, will of course be its perfection as an organ of the mind, as a perfectly-formed animal is the best fitted to discharge all the functions to which it was ordained.¹ It does not, however, by any means follow from this circumstance, that because a brain is well or even perfectly formed, therefore the individual himself should be correspondingly endowed as regards his intellectual faculties; for this would be, not to consider the brain as the organ of the mind, but as the mind itself. An expert musician will no doubt perform

⁸ *Sir Matthew Hale* remarks that the body could not be reduced into that orderly frame in which it is constituted, without the plastic and formative power of the soul.—*Origination of Mankind*, c. i. p. 31.

⁹ *Lord Bacon* refers to the power of imagination upon the child in the mother's womb.—*Nat. Hist.*, Cent. X., p. 945.

¹ *Mr. Darwin* states that "as the various mental faculties were gradually developed, the brain would almost certainly have become larger."—*Descent of Man*, vol. i. p. 145.

best on a good instrument, but to argue that a good instrument must necessarily act well, whoever performs upon it, would be utterly contrary to reason.² Just so is it with the brain, which is but the organ or instrument of the soul. The brain is, however, dependent for its excellence as an organ, not only on its form, but its texture and temperament, and on the general health and condition of the whole bodily system.

If, on the other hand, we suppose the conformation of the brain, and not the qualities of the soul itself, to be what really contribute to, and in fact constitute the mental system; then must we consider the brain itself to be the very mind, and that every man's intellect may at once be judged of as unerringly as we form our opinion of his bodily strength—from the development, and symmetry, and size of his material organs. Thus, then, might we be able unhesitatingly and immediately to decide on the mental power of a man, as we do respecting the physical qualities and capabilities of a horse—by a mere inspection of his material structure and organization.

If some doubt or question be raised respecting the strict accuracy of the principle here laid down, as to the intellectual constitution and power of the individual depending entirely, not upon his material formation, but upon the nature of his soul only; I may venture to suggest that a perfect organization and development of the brain sometimes exist, although the soul is not of a high order, but which by this means being able to exercise all its functions, and to exert all its faculties to the utmost advantage, a considerable degree of intellectual power may be thus conferred. On the other hand, we occasionally find persons of inferior cerebral development, but who are endowed with souls of a high order, whose powers, nevertheless, owing to this fact, have not been able to be fully developed. Under ordinary circumstances, however, as already remarked, it may be inferred that being endowed with a largely gifted soul, will promote the development of those material intellectual organs which it requires and is fitted to exercise; although a want of cultivation, or the prevalence of disease, may prevent such development. But the higher intellectual capacities being the least dependent upon the material frame for their operation, will probably be the least developed through its means, and will suffer the least from the want of such material development.

² *Lord Bacon* observes that the souls of idiots are of the same piece with those of statesmen, but now and then the soul takes soil in an imperfect body, and is so slackened from showing her wonders. *Essay on Death*, 5. It is not impossible, however, that differences capable of producing intellectual and moral results may exist in the very essence of the soul itself.—*Vide ante*, s. v. art. 3, p. 80, and *post*, b. iii. c. i. ss. 3. 9.

According to *Behmen*, the fire of the soul must have the right fuel or wood if it be to give a clear, bright, and powerful light.—*Predestination*, c. viii. s. 231.

It appears, however, most reasonable to conclude that it is the countenance which in each case affords the truest test of the actual nature of the soul, as this is largely and constantly affected by its workings; while the cerebral organs are so affected visibly but to a small extent: and that the formation of the temples is that by which we should mainly judge of the structure of the material mental organs.

Man alone is endowed with the power of varying the general aspect and mould of his countenance, so as to denote or reflect thereby the operations and passions of his soul. In nearly all animals the features are fixed, and immovable, and unvarying. Moreover, among savages we do not perceive that strongly-marked difference and variety in their faces which distinguish the individuals of civilized races. This peculiar adaptation of the material features in man to exhibit and as it were reflect the operations, and as a consequence also the nature and quality of the soul, affords additional evidence that the countenance is indicative of the real character of the individual.

The physiognomy constitutes, as it were, the shadow of the character of the soul, the reflection caused by its image on the surface of the countenance. Indeed, if every face expresses some particular character, and if the character on the same face varies at different times, surely that which determines both the general bent of the particular character ordinarily expressed on the countenance, and the peculiar changes which take place, must be the particular individual character possessed by the soul, which is the mainspring and director of all the voluntary bodily motions. The character acquired by the features is impressed upon them by the soul, and is therefore in reality that of the soul itself.³ We see this plainly as regards moral qualities, such as benevolence, malevolence, impetuosity, and the like. But it is no less the case as regards mental characteristics, if we only knew how to discover and discern them. Unfortunately, however, they are not so apparent. Hence the features reflect the character of the soul, being in their early and gradual formation moulded by its influence. They are, as it were, the wax of which it is the seal. Could we but see the soul, as we shall doubtless do in a future state, these qualities would be visibly stamped upon it as distinctly as are apparent the varieties of leaves in different plants, and of colours in different flowers; and its general character would be at once discernible at a glance.

The basis of the principle of physiognomy appears consequently to be this: That in every object, of whatever kind, which possesses a character of its own, some visible, obvious,

Sir W. Lawrence asserts that "intellectual cultivation is what constitutes most to diversify the features."—*Nat. Hist. of Man*, s. ii. c. ix.

and striking manifestations of that character are in some way exhibited, and that not only in animate, but in inanimate beings—in trees and flowers as well as in beasts and birds. If, however, these each display their peculiar and appropriate character, may we not conclude that the countenance of man would do the same, which far excels them both in the individuality and power of expression that it possesses, and which it is able to exert with precision and intelligence, instead of being lifeless and merely symbolical in the attainment of this end? Indeed, whether the soul is mainly acted upon or affected by the body, or the body by the soul, the features still serve indubitably and veraciously to reflect and exhibit the real character of the soul.

On the other hand, it ought ever to be borne in mind that the countenance reflects the nature and the operations, not of the intellectual faculties and capacities only, but of the whole soul; and displays far more in its tracings the various emotions, and feelings, and passions, and desires, by which it is agitated, than any actual powers or endowments which it possesses, although the operations of the latter are displayed upon it. But as these act both less forcibly and less frequently than do the former, the traces which they leave are less marked and vivid; and therefore it behoves us to be on our guard against forming an opinion of the extent of the mental capacity of any individual from the peculiar expression which his countenance displays, and which is the result, ordinarily, rather of mental working and of excitement of feeling, than of the actual possession of mental power of any kind, which does not so exhibit its existence.

The expression of the countenance is, moreover, in many ways fallacious; and in proportion as it is subject to changes when the individual himself varies, so is it subject also to be made to assume the temporary character which he may be induced to put on. As the fair surface of the ocean, glistening in the sun, and reflecting the varied tints of the sky, appears all loveliness and glory, while it conceals in its depths many a foetid carcase, and numerous hideous monsters; so the smiles of an engaging countenance may serve but to veil the foul passions which burn within, and to disguise the depravity and malevolence secretly imbedded in the heart.

Manner is also probably largely influenced, if not actually produced, by the nature and operation of the soul upon and through the body, in a manner analogous to that in which the formation and character of the features are effected. The features, indeed, may be regarded as the passive, while manner is the active, exhibition or reflection of the character of the soul.

4. *Material Influences on Spiritual Beings.*

The influence which is exerted on the spiritual part of our nature, in consequence of its union to a gross material frame, is very extensive, and may be traced in various ways, corresponding with the nature of that material being, and the tendencies which such connexion with it is calculated to create.

The body is, indeed, to the soul very much what the ground is to the plant. The plant is extensively dependent on the nature of the soil, and its particular quality, for the vigour and fertility which it acquires, although the actual, essential, individual nature of the plant can never be changed by the character of the soil.

The influence, as regards the exercise of its operations, possessed by the body over the soul, is, moreover, nearly analogous to that exercised over the body by the state of the atmosphere, through which it is either invigorated or debilitated in respect to its exertions, without having any of its actual powers at all affected. Its ability to exercise these powers is extended or abridged according to this influence; but the essential quality, and the adaptation of these powers, remain the same.

As regards the reciprocal moral influences mutually exercised over each other by the material and spiritual parts of our constitution, it may be observed that not only are all the desires of the body appeased for the gratification of the material frame, but even the very soul frequently appears to care far more about the body than about itself. Immortal in its nature, most of its anxieties are for the things of mortality, and it seems to be concerned comparatively little for those which appertain to its own proper and indeed natural sphere—immortality of existence in a future state of being.

The whole condition, however, of man in this life, alike as regards his wants, the state of the world around him, the productions of the earth, and its various inhabitants, is in every way calculated in the highest degree both to prove and to perfect him; to call forth his abilities, and to ameliorate his moral nature.

It appears that we may also very fairly, and with good apparent reason, suppose that for the complete preparation of the soul for its future condition, and the attainment of full perfection, not only as a moral but also as an intellectual being, and for bringing out and developing all its faculties, and energies, and powers, a temporary union of it with a gross material frame is absolutely essential. While in this state, many of its capacities will be most strenuously exerted, and consequently also most perfectly developed, when they have to

resist the impulse of some encumbrance which impedes their action. Such a condition, moreover, will serve to give the fullest relish and zest to the free exercise of those endowments, on the restraint on them being removed. As a bird which has been entangled in a snare, and has for a long time been impeded by it wherever it has directed its flight, on getting rid of its burden feels more free and more agile than it ever did before, and mounts the air with more than treble its wonted vigour and spirit; and as the captive enjoys his liberty far more after his escape from prison than he ever did before he experienced the loss of it; so the soul, having been once subjected to this "bondage of corruption," will be endowed with considerably more energy and alacrity when freed from it than if it had never been so restrained. From having been placed in this condition it is, moreover, probable that many endowments and powers will be called into action which, had it merely existed in a pure separate state, unalloyed by matter, would for ever have lain dormant. The mastery over the appetites and passions and the other animal influences of our nature, can only be completely effected through the medium of this union, inasmuch as the exercise of combating with them, when they have the aid of the material frame to invigorate them, and to retard the efforts of the higher endowments, will be the best preparation for an entire victory over them, when the soul, being free and independent, or united to a spiritual frame of the same nature with itself, has no such debasing influence to encounter.

But it seems that in an intellectual point also, this union is necessary if, as it appears may very possibly be the case, and, as already hinted, we can only acquire a perfect acquaintance with matter by being ourselves united to it. How important and extensive a branch of knowledge this constitutes, although our information respecting it is, after all, but very superficial, I need not here assert. But, limited as this acquaintance with matter is, even though we are actually allied to it, it is probable that it would be yet far more imperfect if the soul existed alone as a separate being. Unless we had the ideas of terrestrial objects innately implanted in us, we should be ignorant of the very nature of all terrestrial concerns, and of the whole animal and mundane creation.

Again, as we find both happiness and misery to be but strictly relative terms, our felicity in a future state of bliss must be enhanced, almost incalculably indeed, by the recollection of the pain, and sorrow, and misery, and want, and fear which we endured in this, and from which we shall then feel that we are for ever exempt.

Thus does our existence in this mortal condition, the union between the soul and the body, seem most perfectly adapted in every way to prepare us for that which is to come; at once to

extend our capacities and purge our souls, and to fit them for a higher state of being. As we advance through this career, and approach the termination of our journey, many are the tokens which serve to mark our entrance upon the confines of that land which is to be our eternal resting-place. The material frame is constantly in a state of gradual decay, and by degrees loses its power, and earthly pleasures fade and become more dim, while the soul continues ever to increase in vigour; and at last the earthly prison in which it has so long been entombed, falls into ruin, and the captive escapes and flees at once to his longed-for home.

The probation and preparation sought to be attained through the union of the soul with the body are, consequently, as fully intellectual as they are moral in their nature and object. Although we cannot here expect to perfect our knowledge, we may perfect our capacities for acquiring it; in the same way as, though we cannot here be perfect as regards our conduct, we may prepare ourselves for becoming perfect hereafter. It is, moreover, well worthy of observation as connected with this subject, that those men of the most exalted intellects, and who to the greatest extent have enlarged and cultivated their minds, and done the most to extend the boundaries of human knowledge, have ordinarily had the smallest enjoyment of life, as regards its material pleasures at any rate, and been apparently the least adapted for a terrestrial course; while those who have in their constitution and nature more resembled the animal creation, have been in all respects well suited for the many enjoyments and pursuits of life, and have fully devoted themselves to its pleasures.

A proper and due balance should ever be preserved as regards the influence between the mind and the body, and on neither side should encroachments be permitted, the effect of which is alike and equally injurious to both, whichever party is the aggressor.

Whether in a future state of being, the soul may exist in a condition of separation from the body, or whether it shall be united to a spiritual body capable of exercising all its functions, will probably matter but little as regards its actual power of exertion.⁴

⁴ *Plato* holds that souls which have sufficiently purified themselves by philosophy shall live for ever without bodies.—*Phædo*, 145.

St. Augustine raised the question as to Christ's body, after the resurrection, being one of flesh and blood, but considered it was a mere body of substance. In his recantation, however, he declared himself to be of opinion that it was a body of flesh and blood and bones.

Mr. Isaac Taylor suggests that in a future state the complement of the human faculties may be at length filled up, and the body put in symmetry with the range of the mind.—*Physical Theory of Another Life*, c. x.

St. Paul tells us⁵ that "as we have borne the image of the earthy, so shall we also bear the image of the heavenly." From this we may infer that these intellectual bodies will differ as to the extent of their capacities and perfection, according to the degree in which on earth we have respectively differed from each other in knowledge and in virtue.

The bodies to which our souls will be united in a state of future existence will, I may again observe, be spiritual in their nature, and immortal in their substance, and as to their capacity of duration. As some bodies and some substances are peculiarly liable to be affected or changed by one element, others by another, while in certain bodies and substances there are but few elements of any kind which seem liable to undergo any change whatever; so, although our bodies as at present constituted are fit only to dwell on the earth, yet in the condition in which they will exist after the resurrection,⁶ they may be capacitated to endure in elements and in atmospheres very different to any for which they are now qualified, while those which now suit them may be then quite unadapted for them. The substance of these future spiritual bodies may probably be allied to fire or ether, or some gases, or electrical vapour, material enough to admit of contact with all material substances, and ethereal enough to allow of the freest transmission from place to place, and of the complete operation upon them of the soul. The spiritual bodies to which our souls will hereafter be united, will not improbably differ in their quality and essence from the nature of these souls themselves in this respect only; that while both are alike immortal, these bodies will be composed of matter of a passive kind, which is not capable of moving or exciting itself, while the souls are composed of matter of an active kind, which is capable both of acting and moving of itself, and also of moving or exciting other bodies. Both may consist of very subtle ethereal elements, and both may be alike incapable of dissolution or annihilation. We observe, indeed, certain terrestrial elements to differ from one another only, or mainly, in this respect. Thus, fire is an active element, both moving itself and moving other bodies. Water is a passive element, never moving itself, and capable only of being moved by some other agent.

If God could form a gross material body so admirably adapted

⁵ 1 Cor. xv. 49.

⁶ The celebrated *Dr. Samuel Johnson* wrote a very learned and ingenious tract *On the resurrection of the same body as asserted and illustrated by St. Paul*, in which, although he did not advance any original speculation of his own, he alludes to the doctrines of learned men among the Jews and other nations, some of whom held that each body contained an original and immutable *semen*, analogous to the germ in vegetables; and others that there was a bone called the *Luz*, from which the future body would spring.

as ours is for being the organ of a spiritual soul, surely it may be supposed He could construct a spiritual body equally well adapted for it, and which appears in many respects a less wonderful effort than the former. Whether the circumstance of man being constituted at his birth with a frame which is in certain respects common to both sexes, having some of the organs and characteristics peculiar to each, is owing to any natural inclination to that perfect condition in which he will probably exist hereafter when united to a spiritual body, both sexes being then blended into one, and each individual being perfect in himself, I will not here attempt to conjecture.

Possibly, to some extent, certain of the forms which we see adopted in the insect world, where not only all the organs for locomotion, but many others, fitted for obtaining an acquaintance with the elements about them, far nicer and more perfect than any which man possesses or can design are given to them, may be attached to the spiritual frames with which our souls will hereafter be clothed. And if we regard the nature and structure, and consider the apparent adaptation of the planets; and if we bear in mind also what the most renowned astronomers have supposed to be their destination; we can hardly doubt that the planets are inhabited by a race of beings both living and intelligent. But although we have every reason to believe that the planets are inhabited, yet we cannot doubt that the beings who dwell upon them must be necessarily constituted and endowed in a very different manner to what we ourselves are. These worlds, indeed, seem wholly unfitted to be the residence of terrestrial corporeal creatures. Nevertheless, as the abode of some beings or other, it is but reasonable to conjecture that they were ordained; and, on the other hand, their existence affords a strong presumption of the existence also of such beings. We can hardly indeed deem it probable that such vast systems exist uninhabited by living and intelligent creatures, considering especially that life and intelligence are the primary objects of God's creation and care. Nor is it an argument against the planets being the abode of creatures wholly different to ourselves, that the same laws of attraction and gravitation, and with regard to light, are discerned to prevail there as we find established on our earth; inasmuch as those laws prevail only as regards the material elements, but may not have relation to beings who are quite independent of them. In certain respects, however, these planets are obviously quite unfitted to be the abode of animated beings of our own nature. If, therefore, we believe that there is another race of beings in other worlds which we nightly behold around us, although we may reasonably conclude such beings to be very differently constituted and endowed to ourselves; there is surely no great difficulty in believing that we ourselves may

exist in a future state in another world, and in a totally different condition.

5. *Purgation of Soul by Separation from Matter.*

Having considered thus far the influences exerted upon the spiritual part of our nature by its union to a gross material being, and the obstacles which are thereby presented to many of its operations, especially those of the most exalted kind; we can hardly fail to arrive at the conclusion that a period of entire separation of the soul from the body, must naturally be expected to be one of great benefit to the soul as regards its purgatorial effect in freeing it from the tendencies, in many respects debasing and lowering, which such a union must inevitably produce.⁷

There can be no doubt that, according to what is revealed to us in the Scriptures, there is a separate state for departed souls, between the period of the death of the body and its reunion to the soul at the resurrection. That this intermediate condition is one of consciousness also, appears not only probable, but may directly be inferred. In Scripture, indeed, this state of separation is compared to or spoken of as sleep. But sleep is or may be accompanied by dreaming. And very similar to sleep during dreaming does it appear most probable that this intermediate state will be. And it seems also reasonable to suppose that this intermediate state of the soul while separated from the body will be one of purgation as well, in which, by purifying itself from its gross inclinations and carnal habits contracted while in contact with the body, it may be completely adapted for union with an intellectual and spiritual, although material, frame in heaven. Nor does it appear to be contrary either to Reason or Revelation, to believe that the intermediate separate state of the soul may be also to a certain extent one of strict discipline, if not of actual probation and trial as well. It is possible, indeed, that as the soul's condition here when joined to a body was entirely one of trial, and as it is to exist for a time in a separate state independent of the body before it enters its final condition of union with a spiritual body; the second state of separation and independence may be adapted for trial and discipline also, although of a very different nature

⁷ Although *Plato* does not directly assert this doctrine, his reasoning leads to the conclusion that souls will hereafter be purged by separation from matter.—*Phædo*.

Socrates is, however, made distinctly to state that the soul must be purged before it knows the truth, and that the purgation of the soul consists in its separation from the body, renouncing all commerce with it, and living by itself.

to what we experienced while on earth. Not improbably, indeed, the soul may be as much changed by its separation from the body, as the body is by its separation from the soul. As the soul during its union to the body was unduly influenced by and subjugated to material and sensual enjoyments and feelings; so in its separate state it may become almost as extensively, or at least as exclusively, influenced by those of an entirely opposite nature, until at length, all its carnal propensities being sufficiently subdued, while its intellectual powers have been correspondingly developed, it will, by its career on earth and its separate career conjoined, be in every way fully and perfectly prepared for the exercise of all its functions and all its powers when united to a spiritual although material frame, completely adapted for each of these purposes and efforts, and when it will have many new and varied offices to fulfil.

This separate state of the soul is designed, probably, not so much to put us to the proof as to what we shall do under contending influences; as to purify and elevate the soul, and to counteract the effect of the debasing tendencies to which it has been subjected through the body, by exercising it for a period entirely in exalted spiritual and moral and intellectual contemplations and pursuits. As there will be an entire reconstruction of the body, so will there be also a complete regeneration of the soul effected at the resurrection. As the one is purified by a return to its native earth, so is the other prepared by purgation for its home in heaven.

Possibly, indeed, there may be a superiority of man over angels in a future state, resulting from the advantages derived to man from the full and complete development which will have been afforded to all his energies and endowments and powers by this union of his soul, first to a material frame, followed by its existence in a separate state, and perfected by its being joined to a spiritual frame entirely adapted for all its operations. It is probable, too, that, as already pointed out,⁸ he may derive advantages from his union to a spiritualized body which pure disembodied spirits do not possess, securing, indeed, all the powers which spirit derives from its union with matter, but at the same time being exempt from all the disadvantages and encumbrances entailed upon it by its union to a gross corporeal frame.

It is recorded in the Holy Scriptures, that certain of the angels, and even the greatest among them, transgressed, and kept not their first estate. But if angels are thus capable of and liable to commit sin, may we not suppose that man, when in a future state, will not be wholly free from dangers of this kind? And if we are not free from dangers of this kind, then there is less improbability of the existence of a pre-

⁸ *Vide ante*, a. 4, p. 132.

liminary and preparatory state of being before the day of judgment than after ; and it may not unreasonably be inferred that, for the complete adaptation of our ultimate condition, this preliminary and intermediate state may adapt us, and may probably render our relapse when in our final state of being the less to be apprehended, more especially as we shall then be relieved from the bias of the gross body, having escaped the influences of which, our falling into sin in future is the less to be feared.

Not impossibly, our mental and our moral probation may be considered by the Deity as entirely distinct and independent processes, being brought about by separate proceedings, and entailing rewards of a wholly different nature. Nevertheless, Heaven appears to be a place where the highest moral as well as mental perfection and purity will be experienced and attained. In many respects, moreover, the one promotes, although it may not be essential to, the other. In the Deity alone the two are united, and in the highest degree of perfection.

Not only, therefore, does the supposition that our present state of existence here on earth is but preparatory for another, seem probable, and in accordance with reason, and consistent with the whole scheme and operation of nature, so far as we are acquainted with them ; but it appears to me so likely, so reasonable, and so natural, that the principal ground for doubting of its reality would be that the idea of it must have been produced in the mind from its obvious probability, rather than taught to us by Revelation. When, however, proofs which are beyond all dispute, are afforded to us that Revelation first taught us this sublime and noble doctrine, and that reason is but confirmatory of Revelation, what better or more satisfactory assurance could we by possibility obtain as regards our hope of the endurance of the soul in a future state ?

As death is the gate of life, so immortality will be the light which will illumine the darkness of our present state. There will then, and then only, be first and fully revealed to us the actual nature of a future state, and in all probability also the only real and complete knowledge of that in which we now exist.

It is not impossible, indeed, as already observed, that during the separate existence of the soul, while fully intelligent as to all that is passing around, it may be utterly oblivious of all which happened during its union with the body, although it may have a full recollection of events which occurred prior to that period, if it then had any independent existence. And when the soul is reunited to the body, a recollection may be obtained of events which happened during our terrestrial career, with a partial or entire obliviousness of all that occurred

during our intermediate state and pre-terrestrial existence. Hence, as some have supposed, at the resurrection, the day of judgment may seem immediately to follow the day of death.

We may, moreover, not unreasonably and without presumption infer that as Christ appeared on earth after His death, and before His ascension into Heaven; the mode of His doing so may be typical of, if not identical with, our own course after death. Hence our souls may possibly be permitted to linger on this earth, even taking a part, although unseen, in its concerns, and being present at many of its transactions, although we may not be allowed to make our presence known, or our persons visible, as He occasionally did to His disciples. Such a state will probably seem to us as a dream, during which we may appear to participate in worldly concerns without actually doing so; and continuing in this state, we may not, until the day of the resurrection, when we shall be reunited to corporeal frames, be sensible of the change in our condition that has occurred. Indeed, according to the literal theory of certain of the spiritualists, who believe that people after their death still continue, as before, to hold converse with the world, and even with its every-day concerns, man never really dies; while, according to the materialists—who would deprive us of soul as well as of future existence, and all that essentially constitutes an intelligent, spiritual, and immortal being—man is never really alive.

As regards the essential condition of the soul in a future state, it appears but reasonable to suppose that if the body becomes so refined and purified, and enlarged in its capacities during its separate state, and by its sojourn in the grave,—through corruption being purged of its dross, and losing its grosser particles by decay;—the soul, in a corresponding and an equal manner, will be enlarged and purified during its separate state, and will attain the highest condition of which it is capable, so as to be completely adapted for those sublime and extensive enterprises which it will be enabled to accomplish by being united to a body which will no longer be a restraint upon, but an extensive and essential aid in, those undertakings.*

Our existence in a future state, joined to a body of more enlarged capacities, however extraordinary the revolution may appear, is not in many respects more wonderful than what we already behold in the phenomena of nature, where we see the grovelling insect, which either crawls upon the surface of the earth, or buries itself beneath it, or lives in the water, apparently dying and becoming enshrouded in a chrysalis, where for a long

* *Mr. Isaac Taylor* conjectures that, in a future state, the spiritual body may be so purely the instrument of the master power, that it will barely, if at all, enter into the consciousness as a separate existence.—*Physical Theory of Another Life*, c. ix.

period it lies a seemingly lifeless mass, until animated by the genial rays of the summer sun, the shell is burst, and an animal comes forth, not the same as that which enveloped itself there, but one of a totally different nature, of elegant shape and splendidly glittering hues, wonderfully in all respects contrasting with the base worm from which it was raised, and possessing capacities of an infinitely higher character. The new animal feeds on different substances to the former one; and its pursuits and tastes and enjoyments, possessing as it does the wide range of the air for its sphere of exercise, are far more abundant and extensive than that of the worm from which it sprang.

The dragon-fly is an animal as much exalted beyond its larva, and differs as much from it in its nature and pursuits, as a pure spirit or spiritualized body does, as an intellectual and moral being, from a man. As the rays of the sun call one into life, so the glorious dawn of the summer of immortality shall summon the other into everlasting being. The difficulties with respect to this transformation, so far as regards the change in the animal or material part of our nature, we therefore see here obliterated, as a parallel transformation in the instance alluded to actually takes place. The supposed difficulties with respect to the spiritual change effected, must be acknowledged to be much less. The insect at its transformation is endowed with entirely new powers and tastes. The soul, on the other hand, while united to the body, is fully adapted for the exercise of all its faculties, though restrained by this union from displaying them fully during its existence in that condition; so that its new state of being appears in reality better fitted for, and more natural to it, than was the former one.

Whenever in nature we observe transmigrations of this kind, the change is of itself invariably not merely to a totally different, but to a higher condition; as that of a worm into a fly, of an egg into a bird, of a fœtus into an animal, of a seed into a plant. From this we may therefore reasonably infer that our own transmigration will in a corresponding manner raise us into beings of a nobler order.

The dragon-fly is said to be enclosed and imperfectly formed in its larva. By the same analogy is the soul, which is to an intellectual and immortal being what the germ of the fly is to the worm, included in the human constitution, and continues to exist while the material frame is mouldering in the grave, awaiting its great and glorious transformation.

There can be no reason for supposing that the soul may not from its nature exist in many, if not in all respects as perfectly, when separated from the body, as when united to it. Indeed, the latter condition must be acknowledged to be in reality the most natural. It does not, however, appear to be impossible that, as already suggested, some souls may exist in a future state

without being joined to any bodies at all, as is probably the case with the angels, who have never been united to corporeal frames ; although the generality of souls may at the resurrection of the body be reunited to their original bodies in their renewed state. This continued separate existence may be decreed either as a reward or as a punishment, or it may be determined by the particular character or quality of the individual soul.

Not improbably, indeed, a portion of the reward and punishment assigned to mankind hereafter, may consist either in the reunion of them to, or continuing them separate from, the bodies which they possessed while on earth, and in the different mode in which these bodies may be "glorified," or in other respects constituted. And to this St. Paul seems to have alluded in 1 Cor. xv. 49. The state of entire separation is possibly that which is the nearest to the condition of God Himself, although souls in general, without some spiritualized frames, may not be completely adapted for the full exercise of all their capacities. Moreover, the expediency of such an endowment may depend on the essential nature of the particular soul ; and the Deity, whose spiritual essence must be presumed to be the most perfect of that of all beings, may from that perfection not require it. Whether, indeed, the angels are pure disembodied spirits, or are united to material frames of a certain body, may admit of much controversy.

As we shall hereafter be consigned to a state of being, the condition of which will be determined by our moral conduct and course ; so it is not improbable that, as intellectual pleasures are those mainly which the blessed will enjoy, and through which they will be rewarded, the degree of happiness of which they will partake will be dependent on the extent to which, while on earth, they have developed and cultivated their intellectual faculties, and prepared them for that enjoyment. On the other hand, as physical pleasures are those which have mainly led men on to crime ; it is not impossible that in a future state they may be punished mainly by physical pain, the material part of our constitution suffering, as having been itself the cause of our becoming consigned to this condition. Perfect justice would thus be meted out, corresponding with the perfection of its divine administration.

The soul of man differs from the instinctive being or soul of animals, in that it is capable of infinite advancement as regards both its improvement and its power, according to the cultivation which it receives. Thus the soul is to a certain extent dependent on itself for its own growth and expansion ; and according as it exerts itself here, will be the degree of its glory and perfection hereafter.

The soul and the body at the period of parting, are each left to, and each seem at once to follow to the full, the bent of their

own nature. While the soul freed from the restraint of the body aspires at once to Heaven, and indulges in the pursuits of a purely intellectual being; the body at once sinks into insensibility, becomes a gross and inert mass, and corruption disunites and dissolves its particles.

The destruction of the body is indeed to the soul, probably, exactly analogous to what the destruction of the eye is to the mental vision. As the soul, when separated from the body, no longer holds immediate intercourse with material objects, but only with beings of a spiritual nature like itself, with which it directly and at its will communicates, or of which it takes cognizance; so the mental vision, when by the destruction of the eye of the body, intercourse with external objects can no longer be held, is yet exercised as vigorously as ever, and the various subjects of its contemplation are presented before it, in all their vivacity, and according to its will. And as spirits are invisible to the material eye, and are only taken cognizance of by the eye of the mind; so the cogitations of the mind, which are invisible to the material eye, may be taken cognizance of by spirits, and perceived as plainly by them as material objects are by material beings. Thus God, who is the supreme of all spirits, sees all the thoughts of the mind, and perceives whatever passes in the inmost recesses of the soul. Perhaps in a separate state of the soul, there will be the same difference as regards its reception of knowledge, when in that condition and in its present state; as there is between our obtaining ideas of any object at once by the eye, and by the slow and tedious, and often painful process of reading the description of, and reasoning concerning, its form and nature.

It may also be inferred that the spiritual eye is adapted for a far brighter and more intense degree of light, than any which the material eye is capacitated to endure, such as will probably be the abode of glorified spirits. The Almighty Himself is indeed described as dwelling in an atmosphere of light. A medial condition is, however, that alone in which material frames and material organs are fitted to act and to exist. Even the light of the sun in its purity, is far too powerful for our weak gaze, although typical, or rather evidence of, the glorious state of regions beyond our terrestrial sphere. The more perfect the light, the more extensive must necessarily be the range of vision that will be unfolded; and the more extensive the range of vision, the more perfect the organs with which we shall be endowed for its exercise. We now only "see through a glass darkly."¹ We shall then behold without cloud, and free from obscurity.

Whether the soul will be endowed with any entirely original

¹ 1 Cor. xiii. 12.

faculties, differing altogether from what it already possesses, as some philosophers have supposed, is impossible absolutely to determine. It appears to me that the being endowed with a frame fully capacitated for the exercise of all its powers and faculties, which are now clogged or concealed, by reason of the gross nature of the substance to which it is allied, is all that is required to qualify it for the highest pursuits and enjoyments of which its nature is capable. It seems, therefore, to be a question of no moment whether we shall then obtain new faculties, or whether those which we now have shall be so enlarged and perfected as to be completely adapted for that state. On the whole, however, it does not appear to me to be probable or reasonable to suppose that the soul will be hereafter endowed with any actually new faculties or capacities, because, in the first place, those which it now possesses of receiving, of comparing, and of compounding ideas² are at once of so primary a nature, and so complete and comprehensive, as to form the fundamental compendium of all faculties of this kind, and to comprise every description of intellectual capacity which could be bestowed upon us; and, in the next place, our souls being relieved from "the burden of the flesh," and all the clogs by which they are now encumbered being removed from them, they will acquire a degree of perfection as much beyond what they can now attain, as that future condition itself will be superior to the present.

Man appears, both physically and intellectually, a very different being when he has arrived at maturity, and all his powers and faculties are fully developed, to what he did when in infancy, and these endowments each seemed feeble and immature. Nevertheless, a man is born with all his powers and faculties innate. He acquires neither new limbs, nor new organs, nor new intellectual faculties, as he attains mature age. All that really takes place, however extensive the apparent change, is that those powers which he possessed in infancy, although then but weak and dormant, become fully developed and perfected. Now it appears to me probable that what manhood is to infancy, the future state of man's existence is to his condition here. No new faculties will be given to the soul, but those only which it now possesses will be matured and fully developed, and will be free to display to the utmost all their noblest characteristics and powers.

In a future state it may indeed be found that both many intellectual capacities, and also many material forms in organized bodies, which in our present state appear models of perfection, are but the germs of frames and powers yet more perfect, which will only be completely developed in that state of being.

² *Vide post*, b. iii. c. i. s. 4.

It is possible, nevertheless, that the soul in a future state may be endowed with powers and capacities altogether new, and totally different from any which she now has, analogous to some of those wondrous instinctive powers with which we see certain animals gifted, and which are utterly beyond any properties that we possess. But for this there appears no sufficient reason, either as regards the economy of our constitution, or the necessity for such a change.

If any individual man were allowed to live on earth for several centuries, it can hardly be doubted that his intellectual faculties would attain a far higher degree of improvement from the progressive development of them, than has ever yet been experienced in the case of any person, notwithstanding the numerous impediments to intellectual advancement in his present condition, when united to a gross corporeal frame. If, however, this progress in the soul's expansion and improvement might be effected by merely extending our career upon earth, how much greater must we suppose that it will be in eternity, when not only will the period of its advancement be unlimited, but the obstacles by which we are now beset and encumbered, from the soul's union to a gross material body, will be removed, and we shall be in all respects fully capacitated for the highest attainments as intellectual and moral beings, and shall exist in the society of spirits of the noblest endowments and most exalted nature.

Moreover, if the soul acquires certain moral endowments during its union with the body, and if in a future state it is to be rewarded or punished according to the moral condition in which it is now existent; surely it is but reasonable to suppose that it also, and to an equal extent, acquires intellectual endowments as well, and that these it will retain in a future state.

We may then expect ceaselessly to behold the face of the Deity, as the planets, while rolling in their spheres, reflect the rays of the sun in the centre of the system. As the sun is the director and source of light and heat to the celestial bodies, so is the Deity to the spiritual world, and Who will ever hold communion with each member, to whom His divine rays of glory and knowledge and happiness are constantly being imparted.

VIII. DISTURBANCES IN OPERATION BETWEEN SOUL AND BODY.

HAVING disposed of the important question of the union between the spiritual and the material parts of our being, the mode in which communication and intercourse between the two are carried on, and the influences of various kinds which each of

these beings exercises upon the other during the existence of this union and intercommunication; we have next to inquire into the disturbances of different sorts which take place, calculated to interfere with or interrupt this union and intercommunication, the several causes of such disturbances, and the various modes in which they severally act.

When spirit and matter are united and fused into one being capable of active and voluntary exertion, it is essential to the due economy and proper conduct of such being, that the respective influences or energies of each of these two agents alike should be exerted harmoniously, and in such a manner as not to obstruct, but to aid the proper functions of the entire being so constituted. Spirit and matter are, however, in their tendencies and influences, so far as we can know, directly and diametrically opposed to each other, spirit being ever inclined to action, matter equally so to repose.³ Nevertheless, matter, although naturally prone to inaction, is readily and in many ways excited to action; and several other forces besides spirit so excite it. Vitality, for instance, at once and almost ceaselessly stimulates matter to action, and probably in many respects as energetically and constantly as does spirit. The main difficulty therefore appears to be, not merely to cause spirit to act upon matter, but to act upon it in such a way as to promote the due, and regular, and harmonious operation of the entire system constituted by this complex union of spirit and matter. When the harmonious and regular operation of the two beings so conjoined has been accomplished, any disturbance whatever, however slight or transient, to this operation, must prove essentially detrimental to the whole being, although such disturbance is liable to be caused in a variety of ways, and may originate in either of the two beings so conjoined.

1. *Interruption of Intercourse by Derangement of Organization.*

The first of the modes by which an interruption is caused in that intercourse which ordinarily subsists between the soul and the body, and which should ever be harmoniously carried on between the two, is that which results from some disorder or derangement of the physical organization belonging to the material frame, in consequence of which the regular operations of the machine are either impeded or misdirected. Occasionally by this means the union between the soul and the body appears to be broken or suspended for a time, until the disorder which caused it has been corrected. In other cases the union still continues, but the intercourse is irregular, and the influences

³ *Vide ante*, s. vi. a. 2, p. 109.

which each being exercises over the other are eccentric, and uncertain, and in many instances misdirected.

In cases of irregular intercourse between the soul and the body, it is not the soul itself which is diseased or out of order, but these irregularities are occasioned alone and entirely by the disease or disorder of the material frame or its organization, in the several ways that will be pointed out in the present section. The question of disease of the soul, in what manner it arises, and the several kinds of it, will be discussed at large in a subsequent book of this treatise.⁴

If the construction of organization of a specific kind in any particular frame, is calculated to produce a special and corresponding course of action, it necessarily follows that any alteration in that construction or frame must produce a corresponding change in the operations effected by them; and that any interruption or disturbance in the intercourse between the agent and the patient must at once have an effect, and be perceptible, as regards its interruption or derangement of the course of action arising from the influence of the one upon the other. In each of these cases, moreover, a new system of organization must produce a new system of action; and a destruction of the organization, by which its power of operation is terminated, must occasion a cessation of action altogether.

As the varieties of matter and of organized animated beings, seem to reflect and to exhibit an analogous variety of spiritual and intelligent existences; so the variety of disease serves correspondingly and forcibly to reflect the variety of organic operations, the effect upon them of different causes and influences, and the several phases which under these different modifications they assume. Disease may, however, be caused in any animated organized frame, by either the derangement of the organization belonging to such frame, or the abridgment, excess, or deterioration of the vital fluids; indeed, any one of these occurrences may have the effect of producing the other. The consummation of disease is death,⁵ which results when either the organization or the fluids, or both of them, are so deranged or deteriorated, that the functions of vitality can no longer be carried on, whereupon death at once ensues.

2. *Action and Influence of the Soul during Sleep.*

As the constitution of man affords in itself an example, and an illustration, of the connexion between spirit and matter; so sleep, in a corresponding manner, appears to connect death with life, and dreaming to reveal what may be the state of the soul

⁴ *Vide post*, b. iii. c. vii. s. 10.

⁵ *Vide post*, s. ix. a. 2, p. 173.

in its future condition, while it continues at the same time united to the body.

Nor does it appear at all impossible or improbable that man, even while on earth, may exist in two independent separate states—the one terrestrial, animal, and material, which he experiences while waking—the other spiritual, and to a certain extent celestial, which he experiences while asleep. The two conditions may be kept quite distinct, and we may have as little knowledge or recollection of what passes in the one as in the other, while in the alternate condition.

The frequent reference in Scripture to death as a sleep, may not unreasonably be cited in illustration of this hypothesis. In sleep, moreover, the soul is in Scripture on several occasions spoken of as in a spiritual and separate state, when it is able to hold communion with other spiritual beings. At death, therefore, it may be inferred that we shall relapse altogether into the sleeping or spiritual state until the resurrection of the body, when the two conditions will be, as it were, merged into one, and form a complete and perfect state at once, material and spiritual. On this reunion of our souls to their newly-raised and spiritualized bodies, we shall probably, like men awaking from a dream, be restored to a full consciousness of our real, and also of our former, condition, and then first become aware of the changes we have undergone; and shall live again as before, but with certain new powers and endowments.

Sleep is a kind of natural and temporary torpidity of the body, and of the material organs. It appears also to be a sort of harmless, or rather healthful paralysis, which at stated periods steals over and seizes upon the whole system, prostrating many functions, and depriving the entire frame of energy, and even of the appearance of life. On its taking possession of us, we sink gradually and softly into a state of unconsciousness. The spirit seems to exhale from the body, leaving it numbed and lifeless. Sensation and sensibility are for the time almost suspended, and all external action and motion cease.* The body is, indeed, at this period wholly inactive, not merely as regards ambulatory exercise, and speaking, and eating, but all the other voluntary functions. The internal involuntary operations only, which are quite beyond our control, continue to be carried on, such as digestion and the circulation of the fluids. There is this difference, however, between sleep and death, and, indeed, between sleep and certain conditions of torpidity and insensibility, that while in sleep the action of the senses and of certain of our organs which we exert at pleasure

* According to *Hunter*, perfect sleep is an annihilation of the power of present sensation, of the power of thinking, and all traces of the past, or what we call memory.—*On the Brain and Nerves, Works*, vol. i. p. 265.

is merely suspended ; in torpidity and insensibility the whole operation of the frame is very much weakened, and rendered almost imperceptible ; while in death it ceases altogether.

It is possible, however, that, in the case of death, as in sleep, the apparent change to us may not be so great as we apprehend, or even obvious at once ; inasmuch as the ideas presented to the mind may be similar to what we have experienced during sleep, and during a previous state of existence.

The immediate cause of sleep is the exhaustion of the material frame, which consists simply in the withdrawal from it of that energy, whether nervous or otherwise, by which its vigour is sustained, and its activity is promoted. Sleep is also further accelerated by whatever influence contributes to set the senses at rest, such as the cessation of noise from the ears, of light to the eyes, of motion of the form, or placing the body in a posture of repose. The condition of sleep completes that exhaustion and relaxation which were the cause of it, and thus the individual becomes entirely subject to them. By sleep, however, the physical energy is recruited, and the organs lying dormant imbibe new vigour from the body itself ; while the whole material frame rises refreshed and strengthened, and able at once to throw off, and to free itself from, both sleep and the weariness which occasioned it. And as sleep renovates the animal spirits and the exhausted physical frame, so the exhaustion of the physical frame, and the diminution by that means of the animal spirits, conduces in its turn to promote sleep. Thus these two exigencies in our constitution mutually and reciprocally act upon, and stimulate one another.

During sleep, all communication with the external world generally ceases ; that only is carried on which is internal. The ports of the island and the gates of the city are then close shut, so that the transit is merely from one part of the community to another ; no intercourse with foreigners takes place. In some sleep, indeed, being that of the most perfect kind, even internal communication is suspended. In these instances dreams do not occur. Here, however, it may be concluded that it is not that the soul really ceases to act, but from the thoughts which engage it not making a deep impression, they are not remembered. This indeed may be owing to the power and completeness of the sleep in which the body is wrapt.

When sleep prevails, the senses are for the most part closed, so that the mind takes no notice of outward objects. In some instances, however, the senses are susceptible of impressions during sleep, especially those of hearing and feeling, and occasionally also of that of seeing ; and the excitement of these senses during dreaming, will often serve to direct the course of the thoughts. Nevertheless, in most cases, a violent excitement of the senses will have the immediate effect of dispelling sleep, which in a

great measure consists in the torpidity of the senses. Owing, indeed, to this state of torpidity of the body and the material organs, it is that, however strong are the perturbations of the soul, yet its impulses do not cause the slightest action in any of these organs, which during waking are in constant activity, and are ever liable to be set in motion by the slightest impulses from the mind.

The soul during sleep continues to exert itself with the same activity as when awake, although (except in the instances before mentioned) it can obtain no knowledge through the senses of what is passing in the world, and it appears to act wholly independent of the body. When, on arousing from sleep, we remember the ideas which have passed through our minds during sleep, we are said to have been dreaming; but whether we remember these ideas or not, it may be inferred that the soul has not been inactive.

Those dreams only appear to be remembered on waking, of which a recollection is occasioned by the ideas of some objects closely associated with them. These objects are, of course, of a terrestrial, and generally also of a material nature; and unless the ideas of them pass through the mind soon after the occurrence of the dream, no recollection of the dream is produced, inasmuch as the intervening ideas efface all traces of it. It is, indeed, a matter of common observation and belief, that we dream of those subjects which we have been thinking of before going to sleep, and that occurrences which happen soon after our waking are foretold in our dreams. May it not be in reality, however, that dreams are most apt to be recalled when they relate to subjects which we have been lately considering; and that occurrences connected with dreams at once recall their recollection? If, on the other hand, in our dreams our souls should be permitted to hold intercourse with the beings of another world, or to have unravelled to them any of the mysteries of Heaven, we might not be able to recall these ideas into the mind on awaking, inasmuch as no ideas associated with them could be produced by terrestrial objects, and so they become for ever lost and effaced from the memory. In a future state, when associations connected with these ideas will be of frequent occurrence, it is probable that many of these ideas will be recalled. Even in this life, occasionally a glorious flash or gleam of something of this kind appears to flit across the soul, as when waking suddenly from an ecstatic dream, we fancy that we obtain a glance of fading images of this kind before they have been all wholly dissolved. Hence, moreover, revelations by dreams may be brought about by the mere recalling of the ideas which during the dream were infused into the mind.

For aught we know, dreaming—when this spiritual commu-

nion with the soul takes place, and it exercises itself independent of the material frame—may be expressly ordained to counteract the degenerating tendency of its union with the body; and we may surmise that it would be much more debased by this union, if it was not for the frequent periodical recurrence of such spiritual communion, and independent exercise.

Not only does the soul during sleep put forth all the power ordinarily exercised by it during our waking hours, when its energy and influence are very considerable—frequently much greater than those of the body—but the bodily organs and operations being then torpid and paralyzed, the soul is left at liberty to exert itself in full vigour, and to pursue its wonted action free from all restraint.

Dreams consisting in the cogitations and combinations of the mind of different kinds, and being in this respect of precisely the same nature as our waking thoughts—the latter indeed amounting to no more than this—it must necessarily follow that dreams are in all respects as complete and as essential realities as are the exercises of the mind of the same nature when we are awake.⁷ Indeed, from the soul during dreaming being able to follow her own will and bent, far more freely than during our waking hours, it might even be contended that our sleeping thoughts are more entirely the real and genuine efforts of the soul, than are those which take place when we are awake.⁸

Possibly, in certain respects, our dreams appear more wild and extravagant than our waking thoughts, and, as contrasted with them, because in our dreams we perceive things more entirely as they really are, and judge of them more by their actual primary and essential qualities than when we see them while we are awake.

At an early period of society and of the world, dreams were narrowly observed, and were regarded as the medium of communication with the soul resorted to by the Deity. This principle being carried too far, so as to generate superstition, caused them, as is the case at the present day, to be unduly disregarded. As in most matters of uncertainty, the middle course is generally the correct one to pursue, and each case deserves consideration independently, and to be determined by its own merits alone.

Ever since the commencement of the world man seems, however, from whatever cause, to have been growing less and less susceptible of spiritual communication, at least of that nature

⁷ *Hobbes* compares the thoughts during dreams to the stars seen between flying clouds.—*Human Nature*, c. iii. s. iii.

⁸ *Hobbes* adverts to the clearness of conception in a dream, which, he says, is what takes away distrust.—*Human Nature*, c. iii. s. xi.

which is open and obvious. At the beginning of his career he held personal intercourse with the Deity; after that with angels; then he received communications through visions and dreams. During the middle ages the appearance of ghosts, or separate spirits who are nearly allied to humanity, was generally believed in. But in our own day, among the mass of mankind, all supposition of spiritual intercourse seems to have ceased.

If we believe, as appears most probable, that the soul but seldom, if ever, ceases from thinking while we are awake; and if we have evidence, as we have when we recollect our dreams, that it sometimes continues to think during sleep as well as when we are awake; and if we have evidence, moreover, that it does so on other occasions of which we only become eventually aware—then must we be led to infer, if not positively to conclude, that it must generally, if not always do so during sleep, although we may only recollect a small part of the ideas which then pass through it, and which are all terrestrial in their nature. From our not recollecting some, though we do certain others, it appears also more probable that those not recollected are especially spiritual in their nature, and not at all associated with terrestrial subjects. And as but a small portion of our sleeping ideas are recollected, these spiritual ideas must occupy the main part.⁹

Nevertheless, as the soul during sleep still continues in operation, not only are its faculties or active powers then exerted, but it is also as liable then to be affected or excited by different emotions and passions, as when we are awake. Fear and hatred then move it, and it may be agitated by terror or by love.

Although during dreaming the soul seems to be to a great extent freed from the restraints of the material frame, yet the perceptions which it appears to receive of objects are not real perceptions, but are purely ideal, and which arise through the memory or the imagination. Time and space often seem to be entirely annihilated during dreaming, whence it may have been inferred that they will be in a future state. It is, however, a gross error into which some philosophers have fallen, who contend that the mind can really extend itself to, or be present at, whatever object or place it imagines. Nevertheless, we might almost conclude, from the many well-authenticated accounts of persons during dreaming seeing transactions and occurrences in distant countries exactly as they really happened, and at the very moment of their befalling, that the soul at such period does leave the body, and is permitted to visit remote places, as it appears impossible for it otherwise to obtain a

⁹ *Dr. Maudsley* remarks that "dreams not remembered in the waking state may yet affect future dreams."—*Physiology and Pathology of the Mind*, p. 17.

knowledge of these scenes. In cases, too, where we have believed that during dreaming we held intercourse with people whom we knew to have been long since dead, we may not altogether unreasonably suppose that our souls did maintain communion with theirs; and in this sense we might regard dreams as letters sent to us from heaven. Many of the most remarkable communications made to the soul, which are recorded in Scripture, are moreover mentioned to be effected through the medium of dreams.¹

As the soul and life are wholly distinct and independent principles,² there is surely nothing irrational in supposing that the former may occasionally quit the body, either during dreaming or on certain other occasions, without affecting its vitality. And it may be that it always does so, and that it disembodies itself while dreaming, as also in delirium and madness. Indeed, if it be clearly shown that in some cases during life the soul is actually separated from the body, there is no difficulty in believing that it may be also in several other cases.

But as regards many supposed instances of the presence of the soul in certain specific places far distant from the body, this notion appears to be quite erroneous. Nor is it necessary for its acquaintance with the scenes in question, that it should be actually present at them, inasmuch as its knowledge of them may in such cases be derived, as I believe it generally is, from its holding immediate communication with the souls of persons who were so present. If however, the soul was really accustomed to transpose itself to distant places, our acquaintance with localities which we have never seen, or with what is passing in distant lands, might easily be obtained by a mere effort of the imaginative powers, or be revealed in the reveries of a dream. Yet some writers are wont to speak of the action of the soul as though this were the case. Such a supposition has been the origin and the cause of a great many errors. It is, however, obvious that the mind can only recall or contemplate the ideas which it has imbibed or created of any objects which have been presented to it.

¹ *Mr. Gannendro Mohun Tagore*, a native of India and a Brahmin, but now a Christian and resident in London, barrister-at-law, and late Professor of Hindu Law, University College, London, who has very obligingly favoured me with much valuable and interesting information respecting the opinions of the Hindoos on certain of the subjects embraced in this work, supplies the following note to this passage:—"The Hindoos put a religious signification on dreams, and have elevated the subject of dreams to a science. They have books for the interpretation of dreams, offering in this respect many analogies to what you read in the Book of Daniel about Nebuchadnezzar's dream and the interpretation thereof. According to their notions the soul in dreams enters into an ecstatic state, and it is then impressed with visions and revelations of future events."

² *Vide ante*, s. iii. a. 2, p. 51.

The philosophers to whom I allude appear to have gone to exactly the opposite extreme of that of Berkeley, who denied the reality of all matter, and contended that it existed only as a phantasm of the mind. These speculators, on the other hand, affirm that whatever objects the mind has any ideas of, must actually therefore exist.

It is not, indeed, either impossible or improbable that we may be as perfectly oblivious of our dreaming thoughts while awake, as we are of our waking thoughts while dreaming, so that in each condition the thoughts of the other may appear confused. Indeed, for all we know, our ideas during dreaming may be as sensible and as connected as those while we are awake. Our dreams may be rational one with another, and may only appear irrational because we recollect merely unconnected disjointed portions of them; as in the case of a person who reads here and there at random from a book, and complains because these disjointed chance passages taken together do not constitute a perfect connected narrative. In our dreams we recollect former dreams, that we forget while awake, which, however, shows the connexion of dreams one with another, and their disconnexion with our thoughts when we are not asleep. Were it otherwise, indeed, there would be a constant confusion between our waking and our sleeping thoughts. Those dreams which we remember are, as I have already remarked, probably the most material, or the most connected with material objects; and the reason of our recollecting them ordinarily assigned, which is supposed to be the cause of dreaming, is some disorder of the material frame, or the circumstance of our not being perfectly asleep—that is, that in such case the soul is not entirely disjointed from the body. In addition to this, those dreams which appear the most extravagant, may be rational as regards our spiritual existence and capacities of action, and irrational only in reference to our present condition and capacities.

But perhaps it may be urged, in reply to what I have propounded as to dreams being parts of real incidents recollected cursorily and disjointedly, that, even making all due allowance for their apparent incongruity thus occasioned, many of them are so wild and fantastic that they cannot possibly have any relation to reality; and that if they have not, no other dreams ought to be supposed more real. Here, however, I would reply that it is very possible that some dreams may be purely fantastic, while others are quite real; just as among books, we find some which contain nothing but imaginary stories and fables, while others confine themselves to strict matters of fact, or to philosophical reasoning. Indeed, that all dreams are not fantastic is proved by the ascertained reality of some. And it is most probable on the whole that, as in waking, so in dreaming, we are at times occupied in idle musings, while

at other periods real scenes may engage our attention ; and with these may the soul at intervals be occupied when she wanders into eternity.

The reasoning powers are but seldom called into action while we are asleep. Common observation and experience may nevertheless abundantly satisfy us that the soul during dreaming is by no means incapable of reasoning, where that is essentially connected with the subject dreamed about, and the reasoning faculty is excited ; as in the case of one dreaming that he was unjustly accused, who would at once exert his reasoning powers to prove his innocence. The soul is also sometimes induced to this process in continuation of an argument commenced before going to sleep. Nevertheless, how little the reasoning faculty is ordinarily exerted during dreaming, is exhibited by the incongruity of the subjects respecting which we occasionally dream, exciting no surprise or distrust.

Circumstances about which we are dreaming, appear not to be recollected merely, but to be then actually present. The reason of this is that there are no external events or objects perceived by the soul which can have the effect of pointing out to us this error. From the same cause it is that during dreaming we have no idea of time, not possessing any standard by which its effluxions can be measured. Thus days—nay, even months and years—seem to float by us in the course of a few minutes.

A question might perhaps be raised whether the soul itself does not sometimes sleep, and during this sleep also dream. What are called reveries that occur in our waking hours, may be thought to be a species of sleep and dreaming of the soul ; and occasionally, when we are quite awake, we all at once have a recollection of some matter which was not communicated to us through the corporeal senses, but which upon reflection appears to have arisen in the mind only a few moments before, when the soul was thus asleep and dreaming.

The soul itself, however, can never be said either to sleep or to dream, inasmuch as dreaming consists simply in the action of thinking by the soul when the body is asleep, combined with the recollection of these thoughts after we awake. In reverie the soul merely thinks independent of the body, and by the power of its influence for the time absorbs all the attention of the soul upon itself, and draws it off from the body, which is then numbed or stupified, although not actually asleep. Reveries or waking dreams do not differ essentially from those which take place during sleep, as in each case the mind is at work wholly independent of the body, and external objects are entirely disregarded. What dreaming is to reverie, the condition and operation of a disembodied soul may be to dreaming, or to our condition while in that state. We occasionally do not remember the thoughts that were passing in the

mind during reverie, because, as in the case of our thoughts during certain dreams, they relate to subjects wholly disconnected from, and unassociated with those to which we revert on being awakened from our reverie, which are ordinarily those to which the material objects about us attract our attention. In many instances, however, this supposed sleep of the soul was probably not even reverie, but an actual though casual falling asleep, out of which we suddenly started.

As exhaustion of the body is the principal and the producing cause of sleep, so renovation from exhaustion is its primary use. Probably all animals more or less stand in need of, and are more or less endowed with the power of sleep, which is possessed by vegetables also to some extent, or at any rate they are gifted with a corresponding property. Indeed, to animals of the lowest order, and even vegetables, sleep is equally as necessary as to man and the superior animals, and for the same reason—to requite their exhausted energies. In fact, where energy of any kind has been exerted, repose is required, and is indispensable to restore it; and whenever an extensive amount of repose is needed, sleep, which is but the most perfect kind of repose, is also requisite.

3. Suspension of Intercourse during Inebriety.

As has already been demonstrated, whatever cause tends to disturb the regular and efficient operation of the soul upon the material frame to which it is united, or of the material frame upon the soul, or to destroy the equilibrium of influence between the two, has the effect of interfering with and affecting the intercourse ordinarily subsisting between them. Of this description is the disorder of the system resulting from what is ordinarily termed inebriety or drunkenness, which consists in a derangement of the nervous functions, by the operation upon certain organs of the material system of exciting or stimulating substances, whether liquid or solid, and which occasions the suspension of the proper influence between the soul and the body, and consequently causes to be eccentric and uncertain several important operations of each. Inebriety indeed manifests itself in a twofold mode:—1. By rendering irregular the operations of both the soul and the body, and the reciprocal influence between the two. 2. By giving an undue share of activity and influence to certain of the medial endowments and powers, which are derived mainly from the material frame; while it proportionally decreases those of the higher powers and endowments, which are derived mainly from the spiritual part of our constitution. So long as the unnatural condition in question continues, a revolution in the

entire mental and material system is occasioned, disorder prevails throughout both; those higher influences which ordinarily are, and ever ought to be, the ruling powers in the entire constitution, are deposed from their due authority, and anarchy ensues in respect to the general conduct that is pursued. Errors of various kinds also beset the mind, from the senses being not only blunted as regards their power of receiving impressions; but the effect of those impressions is perverted, and they appear different to what they really are.

Hence, inebriety, so long as it continues, occasions a suspension of that constant and regular intercourse between the body and the mind, which takes place when the entire system and constitution are in a healthy and sound condition.

Inebriety, therefore, amounts in effect to a kind of temporary madness or idiocy, being a state of suspension of the due operation of the soul and its powers, occasioned by the disarrangement of the material organs from the causes stated. A permanent continuance in this condition, would be regarded as a settled and confirmed state of madness or idiocy; and, indeed, the frequent repetition of a habit of drunkenness, is one of the chief causes of these maladies. This serves for an additional proof that disarrangement of the material organs, and not any actual direct affection of the soul itself, is the actual producer of disturbance in the due operation between the two. In some respects a person overcome by drunkenness is more strongly affected for the time than one who is afflicted with idiocy or insanity, as, in the case of inebriety, not only his intellect but his very senses also are completely prostrated and paralyzed. Drunkenness will oftentimes serve to exhibit the real character of a person, which before then was concealed, as it magnifies and gives great additional influence and power to the appetites and passions, while it also at the same time checks those of the reason, which would induce him to keep these manifestations in the shade.

4. *Irregularity of Intercourse during Insanity.*³

The most extensive and the most complete of the disturbances which occur to interfere with the intercourse and

³ *Dr. Maudsley*, whose work on the "Physiology and Pathology of the Mind," already several times referred to in these pages, places him in the highest rank among writers on the subject of mental science and mental disease, has been so kind as to allow the author of the present Treatise to submit to him the proof sheets of that part of his work which relates to insanity, for the purpose of correcting any material errors into which he may have fallen while dealing with so abstruse and difficult a topic.

influence which, during a healthy condition, exist between the body and the mind, is that which takes place during the continuance of the disease ordinarily termed insanity; which is caused by and consists in such a derangement or disorder of the material organs connected with, or resorted to in the mental operations, that the proper and natural and legitimate intercourse between the soul and the material frame is either limited or perverted, or entirely destroyed.

Nevertheless, very different, and widely varying from each other, have been the theories which have been adopted by different writers with regard to the real nature of what have been termed diseases of the mind.⁴ Indeed, whether the mind itself is or can be subject to disease, or whether it is only liable to be affected by the ailments to which the body is subject in an infinite variety of ways, seems yet to be matter upon which they are not all entirely agreed. It appears, however, but reasonable, and most in accordance with what we do know of the nature of beings in general, to conclude that a being like the soul, which is immortal and devoid of all the gross properties of matter, cannot be liable to disease of the kind here supposed, however subject to certain ailments peculiar to it, as I shall endeavour to show in a subsequent chapter;⁵ and that what are vulgarly, and for the sake of distinguishing them from the common bodily ailments of the system, termed diseases of the mind, do in reality consist, not in any actual affection or indisposition of that being, but in the disorder of that portion of our material frame which is the organ or engine of the former, termed the brain, through which a great many of our mental operations are performed, and which, by its close and intimate alliance with the soul, communicates to it, or causes it to be affected by, some or more of the diseases or disarrangements to which it is continually and in several modes liable.

All cases of mental disease may be traced to, and included in the following original sources or causes, however differently they may develop themselves at later and maturer stages in their career:—1. Disorder, or disarrangement, or defective construction, of the material frame or its organs. 2. Disorder of the blood or its vessels. 3. Disorder of the animal spirits,⁶

⁴ Under the head of madness, *Plato* classes “that which arises from an inspired deviation from established customs.”—*Phædrus*, p. 107.

⁵ *Vide post*, book iii. c. vii. s. 10.

⁶ *Dr. Maudsley* remarks in a note referring to this passage, “I don’t think we recognize now any other animal spirits than blood and nerve force, which you mention. Animal spirits was a term used by old writers before anything was known of nerve.” Corresponding objections to the use of the term have been made by other persons of high authority. It would perhaps therefore be more in accordance with the conclusions of modern science, if not more correct, to regard and to speak of the animal

or their vessels or organs. 4. Disorder of the nervous ether or fluid, or its organs.⁷ 5. Violent affection of the mind, which may either directly or indirectly produce any of the foregoing conditions. 6. Violent affection of the body, which may occasion in it disease, and also effect the like results. In many instances, one of these kinds of disease will produce the other, and it is probably seldom that either exists uncompounded of the other. In every case, however, it is the material, and not the mental, part of our being which is the real seat and source of the disorder.

Disease of any part of the material frame—its substance, its organization, or its fluids—will produce insanity, in case such disease is communicated to, or affects the brain, as regards its operation as the organ of the soul; while, on the other hand, disease of or injury even to the brain itself, will not produce insanity, unless it affects or interferes with this operation.

Insanity developes itself in various modes, and assumes particular aspects, corresponding with the nature of the disease which occasioned it, affecting the material frame. Sometimes it consists in mental delusion. At other times its main character is the overwhelming influence which certain of the medial endowments or powers have obtained over the actions of the mind. The intense and unrestrained activity of appetite or passion, is another manifestation of its existence. Indeed, the emotions and passions themselves, when unduly excited by natural causes, will produce results akin to, if not identical with,

spirits rather as a result of the condition and operation of the blood and nerve force than as an independent principle of themselves, in which case the producing causes specified in the third source of mental disease would be included in the fourth. The actual existence, as also the ebb and flow, of what are termed the animal spirits are nevertheless perceived and talked of by every one, and by medical practitioners as well as their patients. The nature and functions of the two principles, both as described by writers upon them,* and as regards our internal perceptions, appear moreover to be essentially different. The functions of the nervous ether or fluid seem to be sensitive, and, to a certain extent, intellectual also; those of the animal spirits simply and solely emotional.† Are there not, moreover, some beings, certain plants possibly, which possess animal spirits or something analogous to them, but which cannot be supposed to possess anything of nerve or of nervous fluid or ether? And are not the vessels through which flow the animal spirits and the nervous ether or fluid, separate and distinct?‡ Further than this, the nervous ether or fluid has been supposed to be of the nature of, or allied to, electricity,|| which has not been thought to be the case with the animal spirits.

⁷ According to *Dr. Maudsley*, "mental disorders are neither more nor less than nervous diseases in which mental symptoms predominate."—*Body and Mind, &c. : their Connexion and Mutual Influence*, p. 41.

* *Vide ante*, s. ii., a. 4, pp. 37, 40, 41.

† *Ibid*, pp. 38, 40.

† *Vide ante*, pp. 40, 41, 43.

|| *Ibid*, pp. 40, 41.

insanity.⁸ Moreover, many of the phases of insanity appear in drunkenness, which is clearly occasioned by material causes, whether it be exhibited in wild frenzy, disorder of the intellectual faculties, or mental imbecility.

Insanity is, however, of two main or principal kinds, which are distinguished according to the causes of its origination, and the mode of its development. The first kind of insanity is that which is known by the name of idiocy or imbecility, which consists in a weakness or deficiency, rather than a perversion, as regards their operation, of the mental material organs. In the other kind of insanity, which is known by the name of madness, the action of the mind is altogether misdirected and perverted through the disease of the material frame in the way stated, and the consequent disarrangement of the material mental organs.

The essential distinction, indeed, between madness and idiocy appears to be this: In the former case the machine is out of order, and will only work irregularly; in the latter case it will not work at all.⁹

Insanity of the kind ordinarily known as madness, manifests itself in three separate modes, corresponding with the three principal faculties of the mind. 1. Disorder of the understanding, as when the mind labours under delusion from erroneous ideas or impressions being conveyed to this faculty, which is occasioned by some disorder of the senses, of the brain, or of the organs connected with it. 2. Disease of the reason, when conclusions altogether false and erroneous are formed, although the *data* for such conclusions are correct, but the mind is unable to apply them rightly. 3. Disease of the imagination, which arises when erroneous combinations of ideas, themselves correct, are formed by the mind, and thus this capacity runs wild, whereby the mind is deluded and overpowered, and the person so suffering is led astray by various extravagant fancies, and loses all control over his conduct.

Insanity must, however, be clearly distinguished from the effect of a powerful imagination, which through its energy subdues and controls the other faculties of the mind, and is by this means the cause of considerable error in our mental operations, but which is very different from the extravagant actions proceeding from insanity. Cases occasionally, and indeed not unfrequently, occur of the undue predominance of one faculty or capacity of the mind over the others, arising either from

⁸ According to *Hobbes*, madness is nothing else but too much appearing passion.—*Leviathan*, part i. c. viii.

⁹ Idiots, according to *Locke*, are persons incapable of reasoning; madmen persons who reason wrongly.—*Essay on Understanding*, b. ii. c. xi. ss. 12, 13.

This definition is strictly in accordance with the celebrated one given by *Lord Erskine* in his speech on the trial of Hatfield.

natural constitution, or from the neglect to cultivate certain particular capacities, when the rest have been unduly developed by this means, in consequence of which great irregularity prevails in the action of the entire mind. Indeed, it is but seldom that the whole of the intellectual capacities are duly adjusted and balanced.¹ This defect, arising entirely from mental causes, which alone contributes to what is essentially mental disease, is, however, totally distinct in all its features from insanity, which is produced wholly and solely by physical derangement, occasioning a disturbance in the due operation between the soul and the body.

Insanity, as I have already observed, may originate either in the affection of the mind, or in that of the body, as any strong effect upon either is forthwith communicated to the other. The body is, however, always that which is diseased. The mind cannot itself be subject to this ailment. Hence, the common causes of insanity originate for the most part in the body, such as derangement of the digestive organs, fever, injury to the brain, drunkenness; although occasionally also in mental causes and excitement, which act upon and influence the material frame. This is also further proved by the restless condition of persons during insanity, and their alternate violence and depression, which are produced by bodily disease and irritation, and by the alternate overflow and efflux of the animal spirits. The very countenance too becomes changed, and the peculiar form of the head is often an evidence of idiocy or of insanity.

Savages, who are remarkably free from bodily disease, are also peculiarly exempt from insanity, although among them the passions are strong and often excited, and the imagination is very vigorous.²

Inasmuch as the influences of various kinds between the mind and the body are reciprocal, insanity may in many cases be ameliorated by moral treatment, as tranquillizing the mind contributes also to calm the body.

5. *Stoppage of Intercourse during Insensibility.*

In those cases where the operation of that material organ belonging to our physical frame, termed the brain, upon which the spiritual part of our nature, termed the soul, is supposed peculiarly to act, is for a time more or less either unduly

¹ *Vide post*, b. iii. c. i. ss. 5, 10; c. vi. ss. 3, 7, 9, 10.

² Dr. Richardson, to whose valuable Treatise on "The Theory of a Nervous Ether" reference has already been several times made, and who has very obligingly corrected the proof-sheets of such parts of this work as relate to topics peculiarly within his province, remarks in a note that the statement contained in this passage, which was made mainly on the authority of *Buffon*, is very questionable.

excited, or restrained, or entirely suspended, the intercourse between the two beings is correspondingly interfered with. Such is the case during what is termed insensibility, which is ordinarily produced by some direct affection of, or injury to the organ in question, calculated to arrest or impede its action in relation to the soul, whether by external force, or by disease of the material frame, which extends to this organ.

Those instances of mental inanition, or rather of the suspension of the connexion and operation between the soul and the body, which may be classed under the general name of insensibility, differ from both idiocy and insanity, in that while in both these diseases all the ordinary corporeal functions and exercises proceed as usual; in cases of insensibility, external and voluntary corporeal action ceases altogether. While the actions of man in the former conditions resemble those of a child, or an unreasonable creature; his actions in the latter case are suspended entirely, and he appears like one asleep or dead. As moderate, natural, and accustomed exhaustion produces sleep, which is but a natural function; so exhaustion, which is immoderate and beyond our accustomed use, and unnatural, produces fainting, and other species of insensibility, which if not in themselves unnatural, are at least owing to a violent constraint upon nature. The exhaustion in this case being so much greater than that occasioning sleep, is productive of greater and more complete insensibility, by which the renovation itself may, nevertheless, possibly be the greater. Insensibility from torpidity is, however, produced, not by exhaustion, but by some operation on the material frame, quite independent of the exercise of that frame, as by the influence of cold in the case of animals which become torpid during the winter.

There is this essential distinction between death and torpidity, and indeed all the other conditions of insensibility, that while in the latter case organization remains perfect, the vital fluids and gases continue to circulate, and sensation and animation, although temporarily suspended, are not extinct, or even abridged; in the former case each of these functions and operations entirely cease. In some cases of insensibility, as during apoplexy, the senses, which during sleep are closed, continue to act, although the individual appears unconscious, and to be unaffected by their operations. Whether, in cases of what are termed suspended animation, the soul is actually separated from the body, and returns to it on the restoration of consciousness, or whether it constantly remains conjoined to the body so long as life continues to exist, it is impossible to determine certainly. Nevertheless, it does not seem to be absolute matter of necessity that the soul should always reside within the precincts of the body. Although not generally absent from it during sleep, yet in cases of insanity and insensibility, it

may be permitted to wander forth, and to return after a certain period. Or it may be that it is at such times hovering over, and only occasionally alights to direct the actions of the frame from which it soars.

In the instances of those persons who were raised from the dead by our Saviour, such as Lazarus, the daughter of Jairus, and the son of the widow of Nain, we cannot doubt but that their souls had actually departed from them, and must have been for some hours at least in the place appointed for separate spirits. But if this was so, on their reunion with the body, must they not have brought with them, which they would undoubtedly have communicated to their wondering associates, a full knowledge of that state? Had they done so, we should surely have heard of it; or had any injunctions been placed against their making such revelations, these would have been recorded, or alluded to. We can therefore only account for their not doing so, by their being placed in a condition exactly corresponding with that which we often experience after sleep, when we fail to recollect any portion of what then passed through our minds, mainly I believe because, as I have already remarked,³ no ideas associated with those which then entered it are entertained while we are awake. And if those who have just returned to the living from the regions of the dead, retain in their memories no traces of what they saw, and which must have so astonished and affected them; can we wonder that we have no recollection of what we witnessed before our birth, in a previous state of being, or that the ideas of what passed through our minds during sleep, should also fade?

Animals appear subject to idiocy in some cases, more especially from disease of, or injury to the brain. To insanity of certain kinds they are also subject, although this is manifested in them very differently to what it is in man. To one kind of insanity indeed (if so it may be strictly and scientifically termed), that of hydrophobia, which originates in disorder of some of the vital fluids, probably in that of the blood, they are peculiarly liable. To insensibility also they are subject in the same way with man, and from similar or corresponding causes. From habits of inebriety, to their own honour, and to the disgrace of man, who has that reason to guide him in which they are wanting, animals are happily exempt; although liable to its influences in a manner corresponding with what man is subject to, where they have been induced, or compelled, to imbibe stimulants capable of occasioning these baneful results.

³ *Vide ante*, a. 2, p. 150.

IX. DISSOLUTION OF UNION BETWEEN SOUL AND BODY.⁴

HAVING investigated the mode in which the spiritual part of our constitution termed the soul, is united to that material part of us termed the body, the results and influences consequent on that union, and the disturbances occasioned by various causes which arise to interfere with the regular operation of both the soul and the body, and to interrupt the intercourse between the two beings so intimately united, and so extensively influencing the operations and conduct of each other; we next arrive at the inquiry, by what means a dissolution of this union between the soul and the body is effected, and what are the consequences to both beings, immediate and ultimate, of such dissolution of union taking place.

As any interruption or disturbance in the harmonious operation between spirit and matter, the soul and the body, when united or fused into one being, proves detrimental and obstructive, more or less in proportion to such disturbance, to the due and regular operation of the system; so, whenever the union in question is entirely and absolutely dissolved, the complex being constituted by this union at once ceases to exist, and death forthwith ensues. The spirit becomes thenceforth an independent being, separate from the body, and exercises its operations freed from the restraint and influence of the material frame. Vitality, which is a principle distinct from the soul, although it appears to exist only in those frames to which a soul or spiritual instinctive being of some order is annexed,⁵ ceases to remain in the body after the soul is disunited from it, although the departure of the soul, or of vitality, may not be in all cases absolutely and precisely contemporaneous.

Disease may be said to be the result of the disturbance of the harmonious arrangement and operation of the system, whether as regards its substance, its organization, its gases, or its fluids; and whether the texture, temperament, activity, or quality of either of them is affected.⁶ Any derangement of one part

⁴ Certain portions of this section were incorporated in a paper "On Comparative Longevity in Men and Animals," read before the British Association for the Advancement of Science, at their meeting at Edinburgh in 1871; and which was subsequently read before the Anthropological Institute of Great Britain and Ireland, and printed in the *Journal of that Society*, vol. ii. p. 69.

⁵ *Vide ante*, s. ii. a. 5, p. 45.

⁶ *Galen* defines disease to be that state of the body in which its functions are in any way interrupted; and asserts that it depends upon some disproportion in the constituent elements, or some unnatural condition of the organs.

According to *Hunter*, disease can only be the consequence of some unnatural impression which interferes with the natural action of the body. — *Principles of Disease, Works*, vol. i. p. 299.

of the system is forthwith communicated to, and more or less deranges, the other parts, and also the whole. When the derangement in question is sufficient to produce any considerable effect, the condition so resulting is termed a disease, and is classed and denominated according to its characteristic quality; and must be treated in order either to counteract, to eradicate, or to terminate it, according to the nature and tendency of such disease, and the frame with which we have to deal. In certain cases, indeed, the most satisfactory mode of proceeding is to counteract the injurious effect of the disturbance or derangement occasioning the disease, by the resort to some regimen which will produce an exactly opposite result, as cooling medicine in the case of fever, purgative medicine in the case of constipation. In other cases, the only mode of preventing the evil effect of the disease, is to eradicate the disorder, or rather the efficient agent of it, from the frame, as by removal of stone from the bladder, or of cancer from the flesh. But in most cases, both classes of remedy will probably be applied together, and in conjunction with and in co-aid of each other.

Disease occasions death in those cases, and as soon as the disturbance occasioned by the disease is so extensive as to terminate the due operation of the system, either by destroying or impeding its organization, preventing the flow of its gases or fluids, or changing the texture or temperament to an extent incompatible with the existence of vitality.⁷

The grand feature and characteristic of death is, however, the separation that it effects.⁸ It at once separates the soul from the body, and the man from the world; and by the corruption which it causes, all the different elementary particles of the body are separated one from the other. Death is, moreover, as it were, the commencement of a journey into a new country, and the entrance on a new sphere of existence, where all that we experience is fresh, and strange, and excites our wonder. To a philosopher, death opens a wider sphere of information than his utmost ingenuity can conjecture; and to such a person it is

⁷ *Hunter* suggests that the diseased actions are established on nearly the same principle that the actions of health are.—*Principles of Disease*, Works, vol. i. p. 300.

⁸ According to *Buffon*, as the production of living beings is occasioned by the combination of living organic particles, so death or dissolution is nothing more than a separation of the same particles.—*Nat. Hist.: Reproduction*.

The theory of *Leibnitz* is that in death, although the machine in part perishes, the animal itself remains indestructible.

Mr. Tagore informs me that the Hindoo notion of death is that "it is the separation of the soul from the body; and that after death the five elements slowly separate; the atoms of earth join the earth, the watery mix with water, &c. Death is therefore cited in Sanscrit Panchatua, or separation and passage of the five elements."

really the lifting up of the curtain which veiled not only immortality, but the universe also, as regards knowledge, especially of spiritual existence, the sublimest of all its branches, from his gaze. Death, indeed, extends our intellectual vision as amply as it does our spiritual freedom. In this respect it is essentially and really the gate of life.⁹

The departure both of the soul and of vitality from the body, may nevertheless be gradual;¹ and their irregular quiver and struggle, previous to quitting the languishing frame, often resemble strikingly the flicker of a lamp about to expire from the wick being worn out, and no longer able to nourish and sustain the flame.² Vitality is probably communicated to the body, and pervades it fully, as soon as it is sufficiently organized to be endowed with it. And this principle appears ordinarily to cling to the frame after the departure of the soul, and not like that being to leave the body by a sudden leap, but as it were to crawl out of it, or gradually to exhale from it. In cases, however, of sudden death, the departure of both soul and life seems to be instantaneous and simultaneous.

I should imagine, indeed—and conjecture on this subject is all that we can accomplish—that the passage from life into eternity will be found greatly to resemble our falling insensibly asleep; and that the first glimpses of futurity, when the soul will exist separate from the body, will be very similar to what we experience in a vivid dream, of which, however, we ordinarily remember only detached portions. Probably, also, the immediate sensation of the soul on quitting the body, is one of intense relief, and of freedom from thralldom and restraint, as though suddenly eased of a heavy burden with which it was clogged. It at once feels light and exhilarated, and endowed with vast powers and energies, so that it is able to effect immense

⁹ *Behmen* asserts that the soul is from the Eternal, and at death returns to Him.—*Questions of the Soul Answered*, a. 19.

Harvey remarks that "Nature in death, making as it were a recapitulation, returns upon herself with a retrograde motion, from the end of her race to the beginning of it; from whence she first issues, thither she returns."—*Anatomical Exercises*, p. 29.

¹ *Leibnitz* held that the soul changes its body not instantaneously but by degrees, so that strictly speaking there is no such thing as death, or a state in which the soul is separated from the body.

² *Willis* compares the expiration of life in an animal to the extinguishing of a flame in a candle or lamp, the tallow or oil being consumed, when the spirits cease from their regular motion and become disordered, and partly exhale from the pores with the vanishing heat, and partly ferment. Corruption afterwards ensues.—*Works, Fermentation*, c. viii. p. 23.

Willis also observes that there is an end of either fire or life, if the access of nitrous food, or the departure of effluions be hindered, or if the oily or sulphureous element requisite to either be consumed, too much withdrawn, or perverted from its inflammable disposition.—*Works, Accension of the Blood*, p. 26.

efforts and achievements, of which it was hitherto quite incapable. A far brighter atmosphere of light would then seem to surround it, than when confined to this gloomy abode of the body. Like one roused from a heavy slumber, it gazes around in astonishment, everything appearing new and unaccustomed to it. Each object it views, not as we do by its outward and visible qualities only, but the real essence of its nature is displayed to it. Of the vast world of spiritual existences it has for the first time an immediate and a full perception, and it beholds myriads of these beings everywhere about it, and with which it holds instant communion and intercourse at pleasure, without the intervention of language, or of the senses. The awful presence of the Creator is now unveiled to it, and is ever in view as the centre of the spiritual system, in the same way that the sun seems to us to be the centre of the planetary world. Many things which it perceives, it remembers for the first time to have had experience of before, it may be in occasional flights that it has taken, either during dreaming, or during sleep while not dreaming, and possibly during dreaming when not asleep. All our past actions in the world may then appear to us as dreaming now does, and we shall be unconscious of the new state on which we have entered; and, it may be, forgetful also of that in which we are now existing. As the soul when separated from the body, glides as it were from the confines of time into the regions of eternity, without perhaps even perceiving the vast change in its condition that it has undergone; so it seems probable—so far as we may be permitted to conjecture on a subject so mysterious, and all that is here stated is conjecture, and conjecture only, and must not be viewed as a part of, but merely as a collateral aid to, speculative reasoning—that after the separation of the soul from the body, it may continue in a state similar to what dreaming now seems, when the soul ceaselessly exercises itself independent of the body, perhaps hovering over the scenes of its earthly occupation, or holding intercourse at pleasure with other souls, as in our dreams we occasionally appear to do with those of our departed friends, unconscious all the while of our new state of being, as we are of our condition while dreaming.³

If comprehensively surveyed and considered, the whole condition of our life while on earth seems to be of a strictly and entirely probationary character throughout, one period of it

³ The Hindoos suppose that "at the moment of death, the vital soul, which has an invisible body, resembles the form of the body it had inhabited. Menu says, 'When the vital soul has been purified by the good deeds which have occurred in the body, it is absorbed into that supreme essence, the divine soul of all beings.'"—*Note by Mr. G. M. Tugore.*

ever serving as a preparation for that which is to succeed. Thus, childhood serves to prepare us for manhood, by affording us experience, supplying us with knowledge of different kinds, and gradually developing and maturing our various faculties and powers. In like manner also manhood serves to prepare us for old age. Thus, then, may we consider that the highest reward of a long life is that thereby the fullest preparation for eternity is afforded; although some may be thought not to require to live the whole course of life for this purpose, and may appear earlier ripe than others, so that to them a premature death may be no real calamity. Those who by intemperance or other causes abridge the period of their career, may have at least this consolation, that the anguish and the agony which they have brought on themselves are the most efficient moral remedies that could be afforded to them, and do the most to atone for the want of a longer probationary and corrective existence here, as regards the mastering and subduing of the animal, and material influences of their nature.

It should also be especially observed and borne in mind, that this probationary corrective existence is peculiar to man, and that animals in no degree partake of it, even as regards their life here. Thus, while man comes into the world ignorant, and helpless, and imbecile, but at every stage of his growth goes on developing his powers and faculties, and acquiring experience for the future; an animal is born with all its powers and instinctive faculties perfect, requires no experience or cultivation to guide it, or to obtain knowledge to direct its pursuits. So is it also with respect to the whole period of the career of each. That of the one is throughout but preparatory, and corrective for another. That of the other is in all respects apparently independent of, and unadapted for, any such preparatory purpose, which in their case, even though we suppose them to have a future being, is not required.

The period of life allotted to man, seems singularly and exactly to coincide with the division by the great Author of life, of time itself into separate measures; and the characters of the different distinct periods appear no less each to coincide. Thus, life is limited by the Psalmist to seventy years. Time is divided by Scripture mainly into periods of seven days. If we again divide the life of man into periods of ten years, we shall have a correspondence with each other of the seven days in the week, the character of which will be found strikingly to coincide. Thus, the first ten years of man's life correspond with the Sabbath of the week, as being a time of preparation for that which is to follow, the most sacred period of existence as well as of the week. From ten to twenty is the Monday of existence, when work in good earnest commences, and we begin to enter upon the real business of life. Tuesday, Wednesday, Thursday,

and Friday, being the periods from twenty to thirty, forty, fifty, and sixty years, are all spent in active duties. Saturday is the period from sixty to seventy, the latter part or afternoon of which is by most spent as a time of relaxation, and by the best as a preparation for what is to follow. At seventy man enters on another, his second Sabbath, which is either eternity itself, or a period when that is so full in view, that it ought to be consecrated as a preparation for it, and accounted ever as so much time given out of it to be employed in that great purpose; which is indeed the only legitimate object of all time, and which should never be neglected at any period, more especially as it is granted to but very few to reach the age here especially allotted for this the grand duty of life.

To some extent also the different periods in every man's life, correspond with his state at different periods in each day. Thus, in the early dawn he rises from his bed dim and heavy, as in the feebleness of infancy. In the morning he is vigorous and sprightly, like the alacrity and strength of youth. In the afternoon he is more subdued and calm, corresponding with the quiet of middle age. In the evening he becomes languid and longing for repose, as in the time of old age; although as regards both these two latter periods it is observable that the brightest and most sterling ideas will then sometimes be produced. Some of the greatest works have been achieved by men past their meridian, and the noblest thoughts have occasionally arisen during midnight meditation or study.

Retirement to rest, and our committal to the grave, are too obviously analogous to require any comment. The decline of life should, moreover, be not only its haven but its harvest. The fruits should then be collected which have been produced during the days that are passed; and the grain which has been growing ever since life commenced, should then be gathered into the garner.

As not only the growth which takes place in man, but everything relating to his progress and condition on earth, is calculated to operate as a warning to him; so there is no created being in which there is so great and so striking a change exhibited during each of these stages, as there is in man, and which seems expressly intended for this moral purpose. Thus, he differs from all other creatures as regards his extreme helplessness during infancy, both physical and intellectual. The change from this state to manhood is also very extensive, and the approach of old age is marked by a variety of traits, both physical and intellectual. Not only are the pains and infirmities common to every creature in old age developed in man, but there are others which he experiences much beyond the ordinary lot of animal nature, as in the turning grey and falling off of his hair, the decay and destruction of the teeth, the dimness of

the eyes, the loss of memory and general decline in intellectual activity consequent on the wearing out of his material mental organs. All these circumstances conduce alike to wean him from earth, and to warn him to prepare for heaven.

We may also infer that the precise period appointed for each person to die, is that at which he is most fit to be taken from the world, either because he has then accomplished the purpose for which he was there sent, or because he has given proof that all further trial of him would only add to the weight of his condemnation. Striking instances at least in support of such a view might be adduced, which appears to me most in accordance with what we know of the Divine economy.

I own, indeed, that I am so far a fatalist, or rather a destinyist, if so it may be called, as to believe and feel persuaded that each man is sent into the world to fulfil his appointed end; that his death takes place so soon as that destiny has been accomplished, although never before; and that even the very mode of that death is regulated by the same unerring fate.⁴

The material frame in which the human soul is planted, and the portion of life allotted to the former, seem on the whole to be admirably suited to man's condition here. Life is long enough for all the ends for which it is ordained, and yet not too long for any of them.⁵ Its uncertainty, moreover, is the strongest stimulus to make the utmost of what we can secure. Man has sufficient time given to him to carry out any of the great purposes he may have formed; and yet he has not so much that he is necessarily obliged to waste or misapply some portion of it. He has enough time to prepare for eternity, yet not so much that he becomes rooted to earth. Death may ever appear sufficiently distant to preserve his tranquillity undisturbed, and yet is never so far off as to lead him to despise the day of its appearance. By the gradual decay of his mortal frame, he has warning of the certainty of his approaching end; and yet so slow is the transition, that no pain or violence is endured. The premature deaths of others, teach us not to rely on our own strength; while the lengthened period of some, buoys us up with hope, and secures us from despair. By old age we are, moreover, not only prepared for death, but are even glad to be relieved from our decrepitude and pain.

What a period, nevertheless, is this which we pass upon earth! During a great part of our lives we are in a condition

⁴ The following note to this passage has been supplied by *Mr. Tagore* respecting the Hindoo opinion on the subject:—"When the individual becomes fit for immortality, Menu says, 'Let him not wish for death; let him not wish for life; let him expect his appointed time as a hired servant expects his wages.'"

⁵ *Lord Bacon* observes that a man that is young in years may be old in hours.—*Essays*, 42.

of either disease or decline, which is in reality but incipient death. A considerable share of our time we spend in sleep, which is a state of torpor nearly resembling, and practically the same as death. More than half of the few remaining hours are wasted in idleness, or in something worse. As regards our bodies, by far the largest portion of their sojourn upon earth is passed in the tomb; and those who when they die are not at once forgotten, are the most thought of, and the longest remembered, while they lie in the grave!

1. *Concurrent Progress of Material Growth and Waste.*

In each organized animated frame, there are two active principles which are ever in operation, directly opposed to each other, and immediately counteracting the effect of each other. These are the principle of growth, and the principle of waste.

The principle of growth, which appears to be annexed to, or to be consequent upon the endowment of an organized frame with the principle of vitality of any kind, even of vegetation, consists simply in the power of increasing and renovating itself, more especially through the absorption of nutrition, by means of which animated and also vegetable frames are preserved from waste, inasmuch as they continually renew the portions of their substance lost by this means.⁶

Growth is the result or product of the exuberance of strength and natural substance, in consequence of which this superfluous matter is thrown off in new shoots. The cause and progress of growth, and of waste also, are best exhibited in the case of vegetation. When the tree is young and vigorous, it puts out periodically leaves and branches; but it gradually abates in these efforts as it grows older and becomes more feeble. On the other hand, waste, which is very limited at the earlier stage of the tree, increases much as age and feebleness progress. Nutrition and accretion, by means of certain material organs adapted for the purpose, are constantly going on; and not only aid and accelerate the promotion of growth, but are absolutely necessary to maintain vitality in the frame. The nutriment required for this end is absorbed by vessels fitted for the operation, and with which not only animal but vegetable frames are supplied. Through the process in question, certain external

⁶ *Buffon* observes that nourishment, expansion, and propagation are the effects of one and the same cause. The organized body is nourished by the particles of aliments analogous to it; it expands by the intimate susception of organical parts which agree with it; it propagates because it contains some original particles which resemble itself.—*Nat. Hist.: Nutrition and Growth.*

substances are not merely received into, but absorbed by, the material frame of the creature so feeding upon them, and become amalgamated with its corporeal substance. Nutrition is, nevertheless, imbibed in various ways by plants and animals, and by different plants and different animals. Indeed, the modes of imbibing nutrition appear to be almost as diversified as the various species of nutrition themselves. It may be received through the pores of the skin as well as by the mouth; while superfluous and exhausted substance may be discharged by perspiration, by tears, by vomiting, by urine, and by seminal flow, as well as by excrement.

With the first creation of a germ, growth commences, which developes such germ into a foetus, and enlarges it into an organized frame. Growth continues to proceed, rapid at first, but gradually becoming slower, until at length it wholly ceases, or proceeds but very tardily and feebly.

Contemporaneously with growth is the progress of decay, which, however, does not ordinarily occur in the germ or the foetus, but commences very early in the organized being that is developed from such foetus, proceeding slowly at first, but going on and advancing more rapidly in proportion as growth becomes less speedy and less vigorous. Whenever the progress of waste outstrips that of growth or renovation, which consists simply in growth replacing what we have lost by waste, destruction of the material frame at once forthwith commences, and is soon completed, at whatever period of life this conjuncture occurs, whether in youth, maturity, or old age. Persons indeed may be said to die of old age, not when they have lived so many years, but when they are worn out. Waste is accelerated, if not actually occasioned, by various causes, and is as much mental as material. Sometimes it is occasioned by the soul being too strong for the body; still oftener by the body being too weak for its own proper functions.

Animation of itself causes motion, and motion causes waste, and waste causes death. Is it possible to prevent or to repair the necessary waste occasioned by mere animate motion? Bodies that are inanimate and motionless, such as stones and seeds, suffer little if any waste. To a certain extent indeed the animation which effects or produces waste, exerts itself to repair it. The process both of growth and waste, however, is of a double kind, the one being constant but invisible, the other occasional though visible. The one is the silent and secret renovation of the frame, which is ceaselessly, although unobserved, going on, old parts and matter being replaced by those which are new; together with the corresponding wearing out and disappearance of substance which has lost its vigour and power. The other is the operation of imbibing nutrition which is at stated intervals resorted to, whereby large additions of

matter are directly and visibly made to the frame; together with the corresponding periodical discharge from the frame, by the various processes of evacuation, urinary effluxion, perspiration, and other modes, of superfluous or exhausted substance which the corporeal frame has no longer any occasion to retain, and which is therefore either voluntarily or involuntarily cast forth and abandoned.

The soul from its first creation or existence, or union with the germ or the foetus, although not then itself like the body in a state of infancy, proceeds in its growth, in which it continually progresses; and as it is not, like the body, subject to decay, it is ever and ceaselessly increasing and advancing. But although not liable to decay, the soul is liable to debilitation and impoverishment, which happens or is occasioned by neglect of cultivation, the omission to store it with knowledge, which constitutes its food, and also by the failing of the memory, through which it loses the knowledge it once possessed.

Different material frames are no doubt very differently constituted as regards their power both of accelerating and facilitating growth, and resisting waste; and some are consequently capacitated to last much longer than are others. This we see both in different species of animals, and also in different animals of the same race, and in different human beings. Texture and temperament, as well as organization, and also the quality and condition of the gases and fluids, must each exercise their share of influence here. Waste may, moreover, take place not only of the substance of the corporeal frame and of its organization, but also of its gases and fluids, which may be diminished in their extent, or deteriorated in their quality. So also the texture of the body may become enfeebled; or its temperature may be so heightened as to lead it to consume itself, as in the case of fever.

There are indeed three principal stages or states of waste, of which disorder of the frame, whether of its organization, texture, temperament, gases, or fluids, is the incipient; disunion of the elements of the whole frame, the essential; and dissolution the ultimate. The essence of disease, in most cases, is that it is the triumph of waste over growth, and consequently terminates in decay, dissolution, and death.

2. Organic Destruction by Excess of Waste.

As may be concluded from what has already been adduced in the present section, the excess of waste over growth must inevitably and speedily result in the destruction of the organized frame, or its injury to such an extent as to unfit it to be any longer adapted to be the vehicle of the principle of life, or

even of vegetation, whereupon the condition termed death at once ensues.

Disease of every kind, whether organic, or of the gases or fluids, both promotes waste and prevents growth.⁷ It increases the wear and tear of the system in various ways, while it deprives the frame of that vigour by which growth is promoted, and nutrition is accelerated and turned to account.

Death is, however, occasioned by a number of distinct causes wholly independent of waste by old age, such as destruction of, or extensive injury to, the organization of the material frame, certain alterations in the gases or fluids, their extreme attenuation, or decrease. So also excessive heat, excessive cold, excessive or too rapid motion, and the loss of air, each tend to destroy life. Death by starvation is a direct example of death produced by waste unrelieved by nutrition and renovation.

Death is so far an active principle, that the separation of vitality from the material frame not only puts an end at once to all its energetic functions, and converts what was before an animated moving machine into an inert mass; but the active operation of corruption at once ensues in the same frame, and in every part of it, by means of which an entire change of its substance takes place, so that the separation of vitality from the frame is followed by a separation of each of the primary and constituent elements of the matter constituting the frame itself. The essence of death, therefore, as already observed, consists in, or is the consequence of, a series of separations—a separation of vitality from the organized frame, of the spiritual being from the material body, and of the different constituent elements of the frame one from another. Each principle parts from the other, and resolves itself into its primary independent condition.

Death, moreover, is a condition in regard to the being subjected to it, very different from the mere absence of life; and is in reality, instead of being a mere negative state, as positive as even life itself. A dead body fast falling into corruption, is a very different substance from a lifeless stone, which is in process of no organic change. Decay is, however, a necessary consequence of death; and the dissolution of the elements of which the corporeal substance is composed, is the immediate result of death. Even in vegetable beings, death at once pro-

⁷ *Galen* defined health to consist in the perfect and harmonious admixture of the various corporeal elements, the body being free from pain, and all its functions duly performed.

Hunter lays it down that disease can only be the consequence of some unnatural impression which interferes with the natural action of the body; and he suggests that diseased actions are established on the same principles that the actions of health are.—*Principles of Disease, Works*, vol. i. pp. 299, 300.

duces a change in their whole substance. So a sleeping or torpid creature is essentially different to one dead, inasmuch as decay occurs only in the latter case.

Although vegetation appears to cling more tenaciously to the material frame to which it is attached, than does life, yet its connexion is apparently affected or threatened by much slighter causes. A plant or a leaf will fade and even wither from transplanting or want of moisture, and yet speedily revive again, and be as vigorous as before.

Perhaps, indeed, it might be said with philosophical truth, that natural decay or decrepitude, from a wearing out of the frame, is in reality the only disease of which mankind die, as they all die when their frames fail them, and none die until that is the case. Death, in fact, depends on this contingency, and not on the age of the individual. As many consequently die of this complaint at eighteen as at eighty. And the more natural any death is, the less to be dreaded is it also. Thus death from old age, which is the most natural, although perhaps also the most rare, is the least painful, and resembles falling asleep after the fatigue of a long day's toil. Death by violence, unless it be speedy, as it is the most unnatural, so is it the most agonizing. In a moral sense also it would appear, as I have already remarked, that death comes only when the purpose of our being has been accomplished, and our life is as it were satisfied.⁸

Of all the dynasties which have ever been established throughout the world, or indeed the universe itself, since that universe was first created, the dominion of death is undoubtedly by far the most wide; and of all monarchs the dread king of terrors is at once the most absolute and the most obdurate. Bounded by no seas, fenced in by no chain of mountains, limited by no particular clime, the region of death spreads from pole to pole, probably indeed from planet to planet, as far as even creation itself extends.

3. *Separation of Elements the Essence of Decay.*

Beyond and in addition to the organic disturbance and ultimate destruction which take place in every material animated frame, as a consequence of the excess of waste over

⁸ "The Hindoos suppose that there are one hundred and one ways in which death takes place. Death at the hundredth year of age is natural death, but it is accidental when occurring from bad living, intemperance, poisons, fire, lightning, drowning, sin, which man ought to guard himself against by care, medicines, and prayers. Death is always near; and when it occurs, nothing but the sins and virtuous actions which have been performed, accompany the soul. Single is each man born; single he dies; single he receives the reward of his good, and single the punishment of his evil deeds."—*Note by Mr. G. M. Tugore.*

growth ; a dissolution of the union between the several essential elements that constituted the substance of such material frame must also ensue, as a further consequence of such progress in waste and decay.

In the various changes which material bodies undergo, there is generally, if not always, some characteristic feature which serves peculiarly to denote the nature of that change. In the case of what is ordinarily termed decay in material substances, the essential and characteristic mark of the change in question is the dissolution of the bond which cemented in one common frame the several distinct elements of which such substantial frame was constituted, and the consequent entire separation of these different elements which together make up the material substance in question. In the case of animated frames, this dissolution or dispersion of their various elements commences at once on the departure of the vital principle from such frames, whereupon a separation ensues of each of such elements constituting their substance.⁹

As the different members and parts of an animal, contribute to constitute the entire animal, different objects in nature a world, and different worlds the universe ; so different elements of various kinds correspondingly contribute to constitute each material substance. And the more complex in this respect any substance is, the more purposes may it serve ; but the more liable it is to dissolution by the disunion of its constituent elements. Of all substances, an animated frame is probably composed of the greatest variety of elements. Of all beings, the soul is probably the simplest and purest as regards the elements of which it is composed, or in which it exists.

Every element in nature, which comprises everything real and substantial that exists throughout the universe, is in a constant course of either creation, combination, or dissolution. And these three leading grand operations or principles in nature, appear to correspond with the three leading faculties with which the mind is endowed, and its mode of dealing with ideas ; consisting in its capacities of taking cognizance of them, combining them together, and separating them one from another.¹

It is, moreover, very remarkable to observe how, in the progress of decay of every kind, this operation is similarly and uniformly accomplished through the separation one from another, and the dissolution of the union between, the several constituent elements which together make up the subject of

⁹ According to *Buffon*, as the production of living beings is occasioned by the combination of living organic particles, so death or dissolution is nothing more than a separation of the same particles.—*Natural History: Reproduction.*

¹ *Vide post*, b. iii. c. i. s. 4.

this decay. It is seen not only in the destruction of all animal and vegetable frames, but in thof buildings, of societies, of forms of government, and even of things of mental creation, in each of which it is effected mainly by the separation of the different portions whose union together constituted the being in question. In the case indeed of every material structure or formation, the separation of its parts is that in which consists the essence of its dissolution. The several parts when disunited, like the constituent primary elements in any natural substance, may be each by themselves as perfect as when united; but the being which they together constituted is not only not perfect, but no longer existent.

4. *Reduction to Primary Elements the Consummation of Decay.*

In addition, however, to that separation of elements which constitutes the essence of decay, the final consummation of decay in any material substance, of whatever kind, consists in the reduction of it to the primary elements of which it was originally constituted when such elements were united together, so as to form one entire, complete, and undivided substance.

The immediate effect of death is to terminate action in any organized frame. But corruption, which soon follows death, has in some cases the effect of even restoring motion in such frame to a certain extent, which is caused by the action of its particles, through the escape of gases that corruption occasions.

When the work of decay has been fully accomplished, the several elements which together constituted the substance itself, not merely dissolve as regards their union, and separate one from another, but they each revert back to their original independent condition. Decay or putrefaction is but, in reality, a resolution of the elements, or primary particles of any matter or substance, into their pristine state. These individual elements, when thus disunited, remain the same, but the composition which they constituted, when united, is entirely abolished and destroyed; and the result of the union or combination together of these several elements also ceases, and the effect one upon another of this union altogether terminates. Each separate element becomes sole and independent, and is unaffected by the other. The result occasioned by the separation of elements through corruption, is indeed somewhat analogous to that of the separation of the figures in a sum total in arithmetic. The individual figures remain the same, but the effect and product of their union ceases entirely.²

² *Buffon* remarks that death only separates, without destroying the living organic particles.—*Nat. Hist.: Nutrition and Growth.*

“As the greatest change in nature goes on farther than corruption,

This resolution of primary essential elements into their original separate condition, converts them into the purest and highest state in which they are capable of existing, as they are thenceforth not only subject to no change, but are indestructible and incapable of dissolution or decay of any kind. The only possible alteration, indeed, which they can undergo, is a reunion of them together.

Corruption may be, consequently, at once the consummation of death, and the commencement of life. Into corruption all frames that die ultimately resolve themselves; and yet there is nothing so fertile in originating life as is corrupted matter, whether animal or vegetable. If the soul may exist united to the body when that body is only in a seminal or foetal state, as we have seen;³ it is not by any means impossible that it may continue to exist, connected with the body, when that body is corrupt and laid in the grave, some portion or fragment, however small, of such body still remaining, which may be the resting-place of the soul. Corruption, moreover, as already remarked, is not the annihilation of matter, but only the resolution of it into its pure and pristine elements; in which condition it is not altogether unreasonable to suppose that it may be better adapted both for being the organ of the soul, and for union with it, than when in its ordinary uncorrupted condition.

5. *Annihilation not consequent on Destruction.*

One very important principle essentially connected with the subject of the present section, which it is necessary to understand clearly, and to keep constantly in view, is the entire and absolute difference which exists between the two conditions of destruction and annihilation.

We must therefore rest satisfied that the latter of these conditions is by no means necessarily consequent on the former. Most, if not all, substances which are constituted or made up of several distinct and primary particles, are destructible, such destruction being effected by or consisting in the mere and simple separation one from another of such constituent particles. But so far as these elementary particles themselves are concerned, they are absolutely incapable of annihilation. As regards these particles, indeed, you may divide them each *ad infinitum*, so as to reduce every portion to the smallest atom comprehensible; but they will all of them still exist as com-

so corruption goes no farther than *mortality* of being. It changes the whole *manner* of the thing said to be corrupted, but destroys nothing of its substance."—*Norris's Letter to Dodwell on the Immortality of the Soul*, p. 76.

³ *Vide ante*, s. vii. p. 122.

pletely and essentially as before. Largeness is by no means requisite to the actual existence of any substance.

Every substance is made up of particles, and every particle of atoms, as also of the several elements which contribute to constitute such substance. Every animated substance is in a constant course of change as regards both its atoms and its elements. But although each of these constituents change in regard to their relation to each other, they never change as regards their individual independent nature, and are consequently never liable to annihilation.⁴

As material bodies without being absolutely annihilated, may be so deteriorated or affected by certain changes, as by putrefaction, burning, and other causes, that their efficiency for every available purpose to which we ordinarily apply them is utterly lost; may not the soul by its separation from the body, even if it is not thereby destroyed, lose a great portion of its intelligence and capability for action? To this, however, it may be replied that the soul's separation from the body corresponds not with the destruction of the material frame by the separation of its elementary particles—in which case, although the frame itself is destroyed, which was constituted by this union, yet the separate elementary particles continue to exist perfect,—but it corresponds only with the separation of the elementary particles one from another. The soul, when disunited from the body, like one of the elementary particles of the body when separated from the others, may not only continue to exist, but will do so without losing any of its essential properties by such separation. At death, the constitution of man is destroyed by the separation of its parts, just as a crowd of people is broken up by their dispersion, or a complicated engine is destroyed by taking it to pieces. But as each individual in the crowd, and each wheel in the machine, is not destroyed, but remains the same as before, notwithstanding their separation; so the soul and each elementary particle of matter remain precisely the same and unchanged, although the body itself is dead and decayed. Indeed, as corruption results in bringing every material substance to its ultimate and pure state, by reducing it to its original elementary principles; so death, in a corresponding manner, may bring every animated being to its original and natural condition, by disengaging it from matter, and exalting it to its pure and unalloyed state. If, however, it be

⁴ *Mr. Isaac Taylor*, however, remarks that "those who distinctly entertain the belief of the *creation* of matter out of nothing, ought not to think the *return* of this same matter to its nothingness at all incredible."—*Physical Theory of Another Life*, c. xviii.

Mr. Herbert Spencer lays it down that "by the indestructibility of matter we really mean the indestructibility of the force with which matter affects us."—*First Principles*, p. 245.

proved, of which indeed there is no reasonable doubt, that matter as well as spirit is unannihilable if not indestructible; then must the soul, although in its essence material, be necessarily immortal. Its materiality, at any rate, cannot affect its immortality.⁵

With regard, nevertheless, to many substances, although we cannot absolutely annihilate them so that their material is no longer existent in any form, or modification, or combination; yet it is possible so to diffuse or attenuate them that, although still continuing subsistent and in actual being, they lose all their power and efficiency. Thus, electricity, which when concentrated within a limited space or body, is very forcible and formidable, when it is diffused over a large area or substance, it is weak and imperceptible. So may it be as regards the soul, which although not absolutely annihilable, may yet become so attenuated or diffused as to lose nearly all its vigour and energy, and almost to melt into nothingness.⁶ And in this mode may God, possibly, effect the destruction of souls, but which God only can perform.

Moreover, in ordinary matter, although annihilation cannot be accomplished, but only the change or separation of the different particles or elements, which in effect, however, destroys the substance, and deprives it of all its active properties and essential properties; so with regard to an intelligent principle like the soul, although we cannot annihilate it, and as being uncon-

⁵ *Bishop Berkeley* remarks that it must not be supposed that they who assert the natural immortality of the soul, are of opinion that it is absolutely incapable of annihilation, even by the infinite power of the Creator who first gave it being; but only that it is not liable to be broken or dissolved by the ordinary laws of nature or motion.—*Principles of Human Knowledge*, p. 192.

“The Hindoo notion on the immortality and indestructibility of soul is as follows:—Soul, termed Purusha, Pumas, or Atman, is neither produced nor productive. It is multitudinous, individual, sensitive, eternal, unalterable, immaterial. Intellect, mind, and organs of sense and action are evoked and absorbed in the elements of which they consist. But this evolution and reabsorption, or material birth and death, cannot be affirmed of the soul. Birth and death are predicated of an individual, referring merely to his association with body, which is matter fixed or movable. But the soul is declared expressly in the Veda to be eternal and unborn. It is not of infinite dimensions, as its transmigrations seemingly indicate; nor minutely small, abiding within the heart; but on the contrary, being identified with Supreme Brahma, the Creator, it participates in His infinity. It is a portion of the Supreme Ruler as a spark is of fire. The relation is not that of master and servant, ruler and ruled, but as that of whole and part. Individual souls, emanating from the Supreme One, are likened to innumerable sparks issuing from a blazing fire. From hence they proceed, and to him they return, being of the same essence. The soul which governs the body, together with its organs, neither is born, nor does it die. It is a portion of the Divine substance; and as such, infinite, immortal, intelligent, sentient, and true.”—*Note communicated by Mr. G. M. Tagore.*

⁶ *Vide ante*, s. v. a. 5, p. 98.

pounded as regards either its substance, or its elements, they cannot even be separated; yet by diffusion or attenuation, its force may be so weakened as that its essential nature may be destroyed, and its vigour exterminated. Indeed, in our mental operations we do find that, in a corresponding or analogous manner, while concentration on any subject gives them energy, a division of attention weakens their power. And if the operation of the mind be thus affected, may not its substance or essence be affected also?⁷

It may nevertheless be objected against the possibility of the soul perishing by diffusion, that if it is liable to be so destroyed, the Deity, who is of the same nature with the soul, must be also liable to perish from the same cause. To this, however, it may be replied that although the soul is liable to destruction, but not to absolute annihilation by diffusion, it is probable, and indeed certain, that the Deity alone can effect its destruction in that manner; and that if no other power can so affect it, no power can produce this in the case of the Deity, as He Himself would never accomplish His own destruction. Consequently that, even if the soul of man is destructible by diffusion, He is indestructible by that or any other mode.

It is possible, indeed, though hardly probable, that the soul may already have experienced this diffused, attenuated, and enfeebled state; and that the cause of the weakness of our minds during infancy, and of our being unable then to retain any ideas in them, may be owing to our souls being originally in this condition, gradually attaining condensation, and as they do so acquiring vigour and energy.

But even if the soul is destructible in the mode and to the extent here suggested by diffusion, yet it does not necessarily follow that it is annihilable by this means. Nor would destruction thus occasioned, be more than a temporary diminution of its energies, which might at any moment be resuscitated; and it could never by attenuation be so destroyed as to be incapable of being at once restored by condensation. Its destruction in this manner would be to a large extent rather analogous to the condition of the body while asleep, than to its death, as no essential change in its substance would be effected, nor any actual permanent loss of its energy or power.

If it be objected to the possibility here supposed of the destruction of the soul by diffusion, that thereby the soul is determined to be mortal and perishable, and subject to all the contingencies of ordinary matter; it might be replied that this is only a necessary consequence of its being considered to be

⁷ On this subject the reader may be referred to the extract already given from *Kant, ante*, s. v. a. 5, p. 98.

to a certain extent material, though of all material substances, from its purity and its uncompounded nature, it must be the least liable to destruction, and can never undergo absolute annihilation from any natural causes, but only by the agency of God who created it. And if it be objected that this liability to destruction is the consequence of its materiality, and that therefore we ought not to deem it material, even to the degree of spiritual essence;⁸ it may be said in answer, that being so far material and destructible, is, at any rate, a much higher condition than that of absolute immateriality, when it would in fact have no being or actual existence at all, and live only in the imagination. It would in such a case indeed be indestructible, simply because there was nothing in it of any real being to destroy.

The period of the soul's dissolution, destruction, or annihilation—supposing such a catastrophe to be at all within the range of possibility, which I am utterly unable to conceive—may be either at the death of the body, or at some other time; and as the two events are quite independent of each other, there is no reason why they should be contemporaneous. The soul in such a case would perish either by sudden extinguishment, or by gradual decline, according to the cause or agent of its destruction.

X. SPIRITUAL ENDOWMENT EXISTENT IN ANIMALS; AND THE DISTINCTIVE PROVINCE, AND ESSENTIAL POINTS OF DIFFERENCE, AS REGARDS INTELLECT AND INSTINCT.⁹

HAVING surveyed the nature of the various elementary endowments included in the constitution of that complex creature termed man, more especially as regards his main characteristic in the possession of a soul, at once intelligent and immortal; the union together of a spiritual and a material being, and the several relations existing between these two beings: we have,

⁸ *Vide ante*, s. v. a. 4, p. 85.

⁹ Certain portions of this section formed the substance of a paper on "Reason and Instinct," read before the British Association for the Advancement of Science, at their meeting at Brighton in 1872, and which paper was subsequently read before the Anthropological Institute of Great Britain and Ireland, and is printed in their Journal, vol. iii. p. 73.

Mr. Darwin, who is universally acknowledged to be the highest authority on all subjects relating to animal nature, very obligingly and condescendingly allowed the author of these pages to submit to him such portion of the proof-sheets of his work as relate to Instinct, and was so good as to peruse them for him.

in the last place, to inquire into the essential points of distinction between the intellect derived through that soul, and the instinctive endowments of the animal world; and also between the being which animals possess, and that with which man is endowed.

In a previous section of this Dissertation,¹ I inquired into the various kinds or degrees of vitality with which not only man, but all other living creatures, are gifted. He differs from them in possessing an intelligent, or rather intellectual soul; but in common with them he possesses life and vegetation, and to a certain extent instinct also, which, as I shall endeavour to demonstrate, is the product of, or springs from certain endowments with which he is supplied in common with the rest of the animal world, and which urges on both animals and man to the performance of many acts conducive to their well-being.² These different principles are, nevertheless, quite distinct and independent of each other.³ Some of them are possessed by plants, several of them by animals, and all of them by man.

The two provinces of intellect and instinct resemble two different countries which, in many of their main features and productions, bear a close similarity and affinity one to the other, while in certain other respects they are strikingly and totally dissimilar. Instinct boasts of some productions, and bears some precious fruits, which intellect or reason is totally unable to bring forth; while, on the other hand, the nobler products of intellect are incomparably richer and more luxuriant than anything which instinct can rear, and whose lofty heads tower into the regions of celestiaity, while the ramifications of instinct only run upon the ground.⁴

Intellect and instinct differ, moreover, in two essential modes, as regards the topics which they embrace, and as regards their manner of dealing with those topics. With respect

¹ *Vide ante*, s. iii. p. 46.

² According to *Mr. Herbert Spencer*, "instinct may be described as compounded reflex action."—*Principles of Psychology*, vol. i. p. 432.

³ *Mr. Herbert Spencer* nevertheless concludes that "the commonly assumed *hiatus* between reason and instinct has no existence."—*Principles of Psychology*, vol. i. p. 453.

⁴ It has, however, been contended that even "the difference between mind in the lower animals and in man is a difference in degree only; it is not a specific difference."—*Vestiges of the Natural History of Creation*, 9th ed., p. 315, app.

Mr. Herbert Spencer also asserts the impossibility of establishing any line of demarcation between reason and instinct.—*Principles of Psychology*, vol. i. p. 453.

And while *Mr. Darwin* states that "there can be no doubt that the difference between the mind of the lowest man and that of the highest animal is immense" (*Descent of Man*, vol. i. p. 104), he adds, "nevertheless, the difference in mind between man and the higher animals, great as it is, is certainly one of degree and not of kind."—*Ibid.*, p. 105.

to the first of these points, intellect embraces the consideration of abstract as well as substantial topics, those which are moral and intellectual as well as those which are material, but which latter only are within the scope of instinct. As regards the essential difference between intellect and instinct with respect to their mode of dealing with various topics; while instinct merely takes cognizance of them, so far as sensation proceeding from them conduces to accomplish this end, intellect not only takes cognizance of them in this manner, but proceeds to certain other operations of various kinds, founded indeed upon this cognizance, but carrying on its operations much further, and which are effected by the action of the various intellectual faculties and capacities whose nature and operation form the subject of a separate book of this treatise.⁵

A question of some perplexity, and one not very easy of solution, may nevertheless be raised as to what acts are strictly and solely within the province of reason, and what are those which are alone within the province of instinct; more especially when certain acts are performed which may be accomplished by either, as in the case of many emotions, and of actions consequent upon them, exhibited by animals, whether they are the product of reason or of instinct.⁶ If they are the product of reason, then must not animals possess reason? If they are the product of instinct, then does not instinct perform acts which, in the case of man, are attributed to reason? How, then, shall we define the bounds, and mark out the precincts, proper exclusively to reason and to instinct, separately and solely? What the light of the moon is to that of the sun, so instinct in man is to his reason. In man reason obscures the light of instinct, which shines brightly only when reason is withdrawn.

1. *Instinctive Animal Being.*

One of the most interesting and important subjects of inquiry connected with animal nature, but at the same time one of the most perplexing, and respecting which it appears very difficult to arrive at a satisfactory conclusion, is that

⁵ *Vide post*, book iii. c. i. ii. iii. iv. and vi.

Smellie, however, asserts that "the natural superiority of man over the other animals is a necessary result of the great number of instincts with which his mind is endowed."—*Philosophy of Natural History*, c. xvii. p. 435.

⁶ Upon this passage, *Mr. Darwin* remarks in a note,—“On so obscure a subject as the distinction between actions performed through instinct, habit, and intellect, I suppose that hardly two men would fully agree.”

which relates to the actual being, as regards alike its essential nature and the extent or measure of its intelligence, with which animals are endowed.⁷ That they possess a certain amount of intelligence resembling, and in several respects approaching to that of man ; and that they must consequently be endowed with a spirituality of some kind in which that intelligence resides, and through which it is exerted ; it appears on many accounts reasonable to infer.⁸

A preliminary inquiry may therefore be fairly raised whether intelligence of any kind, and to any extent, is essential to instinct, and whether all the various operations effected by instinct might not be accomplished through the aid of sensation alone, independent of intelligent direction ;⁹ whether, indeed, many of the actions performed by man, are not entirely and solely the result of sensation, and of the impulses that proceed therefrom, wholly independent of any superior guidance. To this, however, I would reply that these impulses are not merely sensational, but instinctive ; and as being instinctive, are each and in every instance directed by a certain degree of intelligence, as may be observed to be the case with the most ordinary and simple of our actions, in which sensation without the aid of instinct is wholly inefficient to direct us, inasmuch as we at once go wrong, even in the performance of the commonest voluntary act, if we are left but for a moment to the impulse of mere sensation alone, and without the direction and correction of instinct. This at once proves that, although instinct may spring from, and be impelled by sensation, it is nevertheless something essentially independent of, and beyond it. Sensation, indeed, merely sets us in motion. Instinct is requisite to direct that motion, and to control its course.¹ But intelligence of some kind or other is essential here to regulate this direction, although it is doubtless often very difficult to determine and to define where instinct ends, and where intellect begins ; and at what precise point actions cease to be instinctive and commence to be intellectual, or to be the

⁷ Some interesting remarks on the habits of animals, illustrative of this subject, will be found in *Aristotle's History of Animals*, book ix.

⁸ *Des Cartes*, nevertheless, held animals to be not only destitute of reason, but probably of all thought ; and he considered that they performed their various functions as mere *automata*, excited to motion only by means of animal spirits, which act upon the nerves and muscles.

⁹ The opinion of there being two distinct souls in man, the rational and the corporeal, appears nearly to correspond with the opinion here expressed of man being endowed with, and guided by, both reason and instinct.—See *Willis on the Souls of Brutes*, c. vi. ; *Science of Brutes*, p. 40. (*Pordage's translation*.)

¹ *Mr. Darwin* remarks that *Frederick Cuvier* and several of the older metaphysicians have compared instinct with habit. (*Origin of Species*, p. 208) ; and *Mr. Darwin* asserts that domestic instincts are acquired, and natural instincts are lost by habit.—*Ibid.*, p. 216.

product of reason. This, however, no more proves them to be the same in essence, or the result of the same power, than the difficulty of defining in certain cases what movable substances ought to be classified as liquid, and what as solid, proves that liquidity and solidity are in reality the same. It is frequently also very difficult to determine with precision where consciousness begins, and where it ends; where the highest instinctive effort of a vegetable is performed without consciousness, and where the lowest rational or instinctive effort of the man or animal is performed with or by the aid of consciousness.

Animals may be observed to exert stratagems of many kinds, and to display cunning and other efforts, which are quite beyond the capacity of mere sensation to effect, and which almost necessarily imply a certain amount, and that no very limited degree, of intelligence, if not of actual intellect.² Moreover, if animals exhibit a memory of past events, they must necessarily possess something of intelligence. If they hesitate in the performance of an undertaking, they must also deliberate; and if they have the power to deliberate, they must inevitably possess something of reason.

Nevertheless, so wide and so impassable a gulph has been placed between man and animals, in consequence of the want of language in the latter, and all mode of interchanging ideas; that it is as impossible for us to obtain any extensive or exact information as to their internal and intelligent instinctive nature, as into the precise nature of the planets, intercourse with which is correspondingly precluded.

A certain amount of intelligence of some order or other, it may be only instinctive, is essential to the production of all except the simplest, and purely physical emotions. Of many other emotions, however, animals are to a large extent susceptible, such as those of joy and grief, and even of hope, and fear, and perplexity. A being which is spiritual in its nature, and in its endowments approaching to intellect, is surely essential in which such emotions can be excited, which cannot arise in a mere material frame alone. Of passions, too, they are the subjects, which require still more some such being in which they must exist.

Not only, moreover, do animals differ widely from each other as to the amount of instinctive intelligence which they possess, and the mode in which they evince it, which may imply a difference in the quality of it as well: but different animals of the same species vary greatly in both these respects; to which

² *Hobbes* observes that animals demur in their proceedings in the same way as man, who deliberates according as he is influenced by the hope of good or evil.—*Of Liberty and Necessity*.

natural constitution, climate, habit, health, food, and many other circumstances may each conduce.³

2. *Definite nature of Instinctive Intelligence.*

What, then, is the essential nature of the endowment known by the name of instinct, and what are the terms proper for its definition?

Instinct appears, and may perhaps be correctly defined to be, an impulse implanted in each animal, and to a limited extent, and in a certain mode, in many, if not in all vegetables also, which is in some cases originated, and in all cases is directed by sensation, or a certain sensitive impulse or irritation. The especial nature, peculiar character, and relative extent of the sensitive organs and endowments in the beings so excited, are what mainly determine the quality and amount of their instinctive powers. Instinct, however, not only varies in each creature according to its nature, organization,⁴ form, and condition; but in each creature it varies so as to adapt itself to the particular exigencies in which he is placed. In many cases experience, to a certain extent, guides or influences the animal in actions which are thought to result from instinct; and hence it is that old animals are so much more cunning than young ones. In all cases, the structure of the material organs and limbs with which the animal is endowed, to a great degree determine and regulate both its habits and its actions. Thus, some are by nature peculiarly and solely adapted for one element, others for another; some for one particular pursuit, or kind of food, others for those of a different description.

Instinct, however, never arrives at, although it may appear sometimes nearly to approach intellect; nor does instinct at all capacitate the beings endowed with it to deal with any of those high moral topics for which intellect alone is fitted.⁵ It exists in man in common with intellect; and before the latter assumes its sway, it exerts a powerful influence. Moreover, acts which originated in the exercise of intellect, may be continued and

³ *Mr. Darwin* remarks that "the mental qualities of our domestic animals vary, and the variations are inherited."—*Origin of Species*, p. 216.

⁴ One writer attributes so much to organization that he proceeds to the length of asserting that "man only differs from the dog inasmuch as he has a higher organization."—*Smee on Instinct and Reason*, p. 220.

⁵ *Locke*, however, says that animals to some extent compare ideas—that is, reason—though but imperfectly.—*Essay on the Understanding*, book ii. c. xi. s. 5.

And *Sir W. Lawrence* asserts that "we cannot deny to animals all participation in rational endowments without shutting our eyes to the most obvious facts."—*Lectures on Comparative Anatomy*, Lect. 4.

carried on by instinct; as is evinced in many operations which we perform, and even in reading, which may be exerted through instinct, although the mind is intent on a different subject. The instinctive impulse in man is also ceaselessly in activity in most cases, during walking and even while standing; indeed without this, no one would keep for a moment upon his legs, but would at once fall down like a dead body. This instinctive impulse is therefore put forth to preserve the balance of his frame, though without his perceiving it, and to direct every action that he performs; while this is effected with so slight a diversion of the mind, from the habit being so frequent, that we omit to observe this very important act in the economy of our every-day life.

Intellect and instinct like two parallel lines, run very near together, but can never by any possibility meet.⁶ Although they greatly resemble one another, they are totally different. Instinct is the highest development of animal being. Intellect is the lowest manifestation of a wisdom which is divine.

These two endowments differ, therefore, not only as to the extent of the powers which they confer, but in their very nature. Indeed, intellect capacitates the being possessing it to move in a different element, as well as to exert himself in a much wider sphere, than instinct does. Intellect is to instinct what flying is to walking. As the power of walking, however perfect, can never enable the individual gifted with it to soar into those exalted regions visited by the winged tribes; so no instinctive power, however extensive, can qualify the animal to soar into the regions of thought, and to exercise itself in mental cogitation.⁷

Instinct acts with the regularity of a machine; intellect with the uncertainty of a living free-agent. All the instinctive actions of animals which spring directly from instinct, are alike and uniform. Thus, all birds of the same species construct precisely the same kinds of nests; all beasts of the same species feed and act in the same manner; and all fishes of the same race have similar habits. But in man, how different is his conduct, where each one acts for himself, and differently in every undertaking; although several of the same country, and class, and

⁶ On the other hand, "some have thought that the intellectual faculties of the higher animals have been gradually developed from their instincts." —*Darwin on the Descent of Man*, &c. vol. i. p. 37.

⁷ According to *Dugald Stewart*, "instinct is distinguished from reason by two circumstances. 1. By the uniformity with which it proceeds in all individuals of the same species; and, 2, By the unerring certainty with which it performs its office prior to all experience." Animals, however, he observes, make some small acquisitions by experience, as appears from the sagacity of the old, when contrasted with the ignorance of the young, and from the effect which may be produced on many of them by discipline and education.—*Elements of the Philosophy of the Mind*.

calling, may be employed in the same pursuit. In the case of the animal, moreover, his work is accomplished perfectly in the first undertaking, unaided by example, and unimproved by practice. In the case of the man, his first attempts are ever rude and unskilful, the aid of precedent is sought for at each step, and in each successive performance improvement advances.⁸

It is very remarkable how wholly destitute animals are of anything like contrivance, such as intellect would enable them to effect; although as regards that semblance of it to which they are impelled by their instinctive powers, their resources are very wonderful. But they are utterly incompetent to move in the least out of the line in which this impulse directs them. Herein they differ essentially from man, who, however rude and uncultivated be his condition, is never wanting in artificial resources. The wildest savages know how to kindle fires, and to make use of them for various appliances, and also construct garments to protect themselves against the cold. But the most highly-endowed animals have never acquired either of these simple contrivances.⁹ As fire appears to be that element which is the most celestial in its origin, so man is the only animal that has availed itself of it; and it is that element by the use of which all his greatest achievements have been effected.

The operations of animals are, nevertheless, many of them, quite as ingenious as any effected by man; but they are all simple in their kind, and are prompted directly by the impulse of instinct urging on the animal to a certain act. Animals possess no originative power whatever, corresponding with that with which man is endowed, and through which he invents different arts and contrivances, and which perhaps constitutes the main and essential distinction between intellect and instinct. Man alone of all terrestrial created beings is able to supply by the resources of his mind, what nature fails to furnish him with. An animal, having no resources of this kind, except where nature points out in some special instances a particular course for him to pursue, is left destitute where she fails him, although to animals she is in this respect far more bountiful than to man. Moreover, while by instinct animals are able to unite materials together, man by intellect is capacitated to combine them into one. By the exercise of his intellect man also actually attaches,

⁸ "A man has to learn his work by practice; a beaver, on the other hand, can make its dam or canal as well, or nearly as well, the first time it tries, as when old and experienced."—*Darwin on the Descent of Man*, vol. i. p. 39.

⁹ "It has often been said that no animal uses any tool; but the chimpanzee in a state of nature crushes a native fruit, somewhat like a walnut, with a stone."—*Darwin on the Descent of Man*, &c., vol. i. p. 51.

as it were, to his own person, those agents and engines and materials of which he desires to make use; and resorts to them as though they actually constituted a part of his own organized frame. Not only, indeed, does he make use of inanimate masses for this purpose, but even living animals and their powers are thus availed of, and are subjugated and applied to his ends.

Animals are entirely destitute of ideas, or of anything corresponding with them, even of a material nature; but the sensations that they receive, which are more acute than those of man, and exercise a more powerful influence from the absence of ideas, are what impel and guide their actions, and operate upon their instinctive being. Animals perform many vast undertakings, but they perform them all blindly. Man also achieves great works, but with the eye of intellect.

In some respects instinct appears to be more perfect in the lower animals than in the higher. Insects, for example, are in many ways more extensively and exquisitely endowed with it, than are either beasts or birds. Their operations are also more wonderful, and proportionably far more stupendous. The comb of the bee, and the nests of some species of ants are, for them, achievements more ingenious and more astonishing than anything effected by the higher and larger animals. The greater instinctive endowment of these minute insects, is probably owing to their superior organization beyond that of many other animals, as their strength is proportionably far greater; and the exquisite delicacy and acuteness of their organs of sensation, enable them to discern the properties of many substances and elements, and cause them to be impelled by this means to certain actions, while the grosser organs of beasts and birds are unfitted to take cognizance of these qualities. It is, further, also to be observed that many animals which seem to us to be but very slenderly endowed as regards their general instinctive capacities, more especially those of them which appear to approach to, or resemble intelligence, are often the most highly endowed as regards their resources of a particular kind.

This instinctive power, which is impelled by sensation, and guided through the influence of the memory as regards experience of the past, appears to be quite sufficient to adapt animals for all the operations which they effect, even in those cases where a certain measure of forethought and calculation seem to be needed, and to be carried on. Of any mental process by which they might accomplish efforts of this class, they are, nevertheless, obviously utterly incapable. Where results of the nature required may be achieved by the means above referred to, they seem fully adapted to effect them. Thus a bird may be supposed to be impelled to construct a nest from a sensation of having something in its own body requiring care

and nutriment which it is about to deposit, which it feels growing within it, and gradually loosing itself from it, as though it would shortly come away. In the formation of its nest, as is peculiarly also the case with bees, the organs that it employs not only direct, but produce, its particular shape. In the pursuit of food, hunger originates the desire for it, while sensation regulates its choice.

The main and essential distinction between intellect and instinct, as regards their respective results, appears therefore to be this—the one produces or prompts a deliberative act, the other an act from a blind impulse. This definition, however, must be limited by several qualifications and restrictions. Thus, impulses affect the deliberations of intellect, and circumstances often vary, and render eccentric the impulses of instinct. As a general rule, however, the one is steady and regular, the other uncertain and irregular, in its operation.

Instinct in its results, however, mainly and essentially differs from intellect, in that while intellect enables man to hold intercourse freely, not only with those around him, but to obtain an acquaintance with individuals and things far distant, and with events long since past; the knowledge of an animal is confined to the things about him, and to his own experience. Among men, the various minds holding intercourse one with another are by this means, as it were, amalgamated into one as regards such intercourse, and the ideas once originated are circulated through the whole community thus blended together, and cemented into one intelligent being.

Animals in their general course of action are guided and urged on by instinctive impulses and sensations; and in the exercise and indulgence of their passions, they are restrained, not as man is, by the supremacy of the intellectual faculties or moral endowments, but by the influence of their different emotions, appetites, and passions, which mutually balance and counteract the effect of each other. Thus, fear often restrains the power of concupiscence, hunger that of fear. In man, too, these various opposite emotions and animal propensities on such occasions counteract the effect of each other, and by this means the soul is enabled to exercise more absolute sway in the determination of the conduct.

It is a circumstance strongly in favour of the proposition which I here maintain, of instinct originating in and being caused by an impulse arising from sensation, that each animal follows exactly the habits, pursuits, and actions for which it was by nature especially constituted and adapted, whatever may have been its education, or with whatever companions it may have been associated. Thus, ducklings rush at once into the water, in spite of the warnings of the astonished hen who hatched them. In animals of prey, each one instinctively

pursues the particular course for which nature fitted it. Man on the contrary, varies his pursuits and mode of life according to his education, and the companions with whom he has been brought up.

Some instincts, as far as we know—such as that just alluded to of the duckling taking to the water as soon as it is hatched—can be not only reasonably and fully, but solely, accounted for by regarding instinct as I have defined it—an impulse in many cases originating in, and in all cases directed by, sensation. May not all instincts be so accounted for, although from certain of them being more complex in their character, we are less perfectly acquainted with their precise nature and operation? In these instances the exquisite nicety of the senses belonging to the animals, may direct them far beyond what we, from our grosser organs, should conceive possible.

In many cases, what is deemed to be an exercise of the instinctive powers, is in reality nothing more than the spontaneous effort, on the first opportunity which is presented, to obey the impulse arising from the action of the organs of sensation. Thus, as regards the propensity of a new-born animal to suck, although it may be instinctively drawn to the teat, if near, by its sense of smell, yet it will suck any other object presented to its mouth. So also as regards its efforts to cry, and to walk, and to swim; these resulting only from the natural exercise of its limbs. Children, it is said, will sometimes instinctively eat certain substances, such as chalk and other earth, which they would not choose as agreeable food, when these substances are calculated to remedy some disorder with which they are afflicted. Feverish persons are also known to have an instinctive taste for acids. This is another instance of sensation originating and directing the instinctive impulse; and it also evinces that man is endowed with instinct in common with animals, although, as his reason developes itself, his instinctive endowments become obscured.

We know not what internal sensations in animals, as in the case alluded to of birds about to lay, may excite them, and impel them to prepare nests to receive their eggs. A corresponding sensation and impulse may possibly stimulate the wasp to construct its cell, and to deposit caterpillars to serve as food for its offspring. The very absence of intellectual endowment in animals, the possession of which might interfere with the direction of the impulse which they receive from sensation, contributes essentially to the perfection of their instinctive endowment, and is in fact indispensable to it. On the other hand, this intellectual endowment in man tends to obscure his instinctive power.

Another proof that instinct is dependent upon the senses, both for its origin and its direction, is that any change in the

senses by disease or accident, occasions also a change in the instinctive impulses. A fever will altogether vary the desires of this nature by its action on the senses; and the new impulses which it creates, will probably be in exact accordance with the peculiar physical requisites of the particular condition in which the individual is then placed.¹

It may be urged, however, against instinct being caused by the perfection of sensation in animals, which originates and directs their impulses, that this would not account for their all of them acting so entirely uniformly as they do. To this objection it may be replied, that this absolute uniformity is a proof, and the very result of, the perfection of that sensation, which being the same, that is, equally perfect in all alike, causes them all to act exactly alike;—just as an impulse given in any particular direction to a material body, causes it to move in a straight line, in which it continues to progress until diverted by some other influence. Our own involuntary instinctive actions are all performed uniformly, because they are in each individual directed by the same cause, and reason does not interfere to alter their course.

Many of the instinctive actions or operations performed by animals, are performed also by plants,² which cannot be supposed to be endowed with anything like intelligence, and whose instinctive actions must therefore originate in, and be directed solely by a kind of impulse created by sensation, in the same mode as this impulse is caused in animals. And if this impulse, although possessed in a much lower degree, is sufficient to account for this operation in plants, surely it is sufficient to account for it in animals.

Nobody supposes plants to possess, or to stand in need of independent spiritual instinctive beings or essences, which enable them to perform their functions. But so far as they require to be stimulated or acted upon for this purpose, they receive their impulses, not from any internal agent, but directly from the same Supreme Being who superintends the general course of nature; although they are only passive agents, and consequently not capable of themselves originating any movements, or even of directing or influencing the impulses by which they are actuated. Some of the old philosophers³ appear to have supposed this to be the case with animals generally; and, indeed, on this hypothesis alone can we conclude that animals perish altogether when they die, and are endowed with no independent spiritual immortal principle, even of an instinctive kind.

¹ *Dr. Richardson*, however, considers the accuracy of this latter statement doubtful.

² *Vide post*, b. i. c. i. s. 1.

³ *Des Cartes*, for instance, and his school.

The extensive power and perfect operation of instinct, I have, to a large extent, attributed to the very perfect organization of the animal frame, by means of which it is able to hold communication with external objects with the utmost facility, and in the most complete manner. It seems to me, further, that by means of its exquisite organization, the material frame of the animal is also adapted to receive all the impulses of the instinctive animal spiritual being, and that in a way far more nice and exact than is the case with man.

How entirely animals are impelled by mere sensation, is evinced by the conduct of one of the most intelligent among them, the bee, which, when it finds its way into a room, has nothing to guide it in its escape thence but instinctively to follow the light, and thus continue crawling on the panes of glass, trying perseveringly to force its way in the direction from which the light proceeds; while, so servilely does its instinctive sensation lead, or rather impel it, that it is destitute of sagacity sufficient to induce it to seek another mode of egress.

Instinct is therefore mainly the result of sensation; and the influences prompted by this endowment in man, and where he proceeds only under the impulse of sensation, occur as regularly, and mechanically, and uniformly, in each different individual, as do the several necessary and involuntary common physical actions of life. However men may vary from each other as to the general line of conduct which they pursue where guided by reason, yet in those things where instinct only directs them, as in the exhibition of their passions, and feelings, and affections, and desires, and appetites, they act as uniformly as animals do in their ordinary actions of life. Just as in man the exhibition of his animal propensities and feelings is effected without any effort of the reason, and from the mere impulse of sensation, and in each individual alike, are the general instinctive actions of animals in all cases performed.

From this blind pursuit of a sensitive impulse, it is that while animals are ever led in the same track, they are so liable to be deceived by the apparent similarity of any objects to those with which they are conversant. Thus, fishes, although they have a very fine perceptive sense, are easily tempted by an artificial bait, and the bull-frog swallows hot ashes, mistaking them for fire-flies. Birds, which are remarkable for their quick and powerful sense of hearing, are deceived by sounds resembling their notes. Instinct is fitted, indeed, to supply only the natural wants and natural occasions of the animal. Artificial contrivances, as they are beyond the capacities of animals to effect them, so are they also beyond their capacities to guard against them. No provision has been made by nature against that which, in the order of nature, would never have taken place.

Reason, on the other hand, is calculated to serve alike for natural and artificial contingencies, although, unlike instinct, it unerringly guides us in nothing. Having no reasoning powers or faculty of reason which can enable them to compare different ideas one with another, animals have no ideas respecting number. Thus a bird never seems to miss two or more of its eggs which are stolen from the nest; and a beast, however sagacious, appears not to perceive the loss of one or two out of a litter of whelps taken away in its absence, although, if the animal were to see this done, it would exhibit the strongest concern. All this proves that its indifference on its return to its den about the one taken away, arises, not from any want of affection or attachment, but from real ignorance of the fact of the robbery, on account of its being unable to discover the loss.

Animals are, as far as we can judge, incompetent to hold communion with each other beyond the mere expression of their wants and feelings, having neither ideas to communicate, nor language to express them if they had any. They have, however, a means of intercourse sufficient for their wants. Besides the verbal language of animals in the sounds that they utter, they have a sort of symbolic language through the postures they assume, and the motions and gestures which they make to denote particular emotions or passions.⁴ Probably, indeed, they resort more to these latter efforts than to sounds for intercommunion. There is, however, this important difference, which essentially characterizes the distinction between their capacities and those of man. Animals use visible or corporeal signs alone. Man uses, in common with these, signs of an abstract nature also.

We may reasonably, I think, conclude, on the whole, that the power of speech in each case corresponds pretty exactly with the intellectual capacity of the being by which it is possessed, and that man is proportionably as superior to animals in intelligence as he is in speech; moreover, that angels and disembodied spirits are as superior to man, alike in intellect and in speech, as he is superior in both these respects to the animal creation.

From the limited nature of the language of animals, they lose but little from the want of each other's society. To a man, however, solitary confinement is the most dreadful and difficult

⁴ *Professor C. J. Plumptre*, Lecturer on Public Reading and Speaking, King's College, London, E. C. Department, remarks on this passage, that "it is a striking fact that all domestic animals, such as the horse, dog, &c., evidently understand the emotional expression of the modulations and inflections of the human voice, in which all mankind express their feelings and emotions, apart from the words in which such feelings and emotions are embodied."

of all punishments to endure. Animals holding no intellectual intercourse with each other, suffer but slightly by being separated from the rest of the species ; whereas this mutual interchange of sentiment, constitutes a large portion of the occupation and the enjoyment of mankind. Hence, an animal of an entirely different species, constitutes nearly as good company for another animal as one of his own kind.

Different kinds of animals, however, differ much from each other according to the constitution of each, in their pursuits and instinctive desires. Animals of prey, being armed with offensive talons, are led instinctively to attack those which are not so protected. Being also endowed with digestive organs fitted for the consumption of flesh, they are induced to feed upon other animals. Those animals of prey whose visual organs enable them to see objects best in the dark, instinctively select that time for hunting their prey. In like manner, also, animals which are adapted for swimming in the water, instinctively betake themselves to that element. By instinctive sensation is occasioned the migration of certain animals, which are led to fly in the direction where their sensations lead them, whether for warmth or cold ; to which they are in many cases also induced by the pursuit of their food, which they find become gradually more abundant as they advance.

Probably in many cases the impulse which excited motion or action in the animal frame, originated in some irritation that may have been produced by the condition of the animal, and which formed the stimulus to exertion. In vegetables, irritation alone seems to constitute the incentive to action. That animals may be instinctively impelled to particular acts by the mere condition of the atmosphere causing an irritation which so induces them, is evinced by the corresponding mode in which plants are excited to certain movements and operations. Thus, the genial warmth of spring stimulates them to bud and produce leaves, while the cold of winter deprives them of their foliage. The appetites, both of hunger and of concupiscence, which urge animals in many instinctive actions, and which take so leading a part in stimulating to exertion the instinctive propensities and powers of different animals, are always occasioned by, and originate in irritation. The conformation of the organs of the senses, in some cases produces a peculiar corresponding development of the instinctive powers. Thus bees and other insects are probably in part incited to adopt the special regular forms in which their cells are constructed, from the formation of their organs of vision, which resemble a multiplying glass, composed of numerous lenses, each of which reflects objects in the same manner, and may represent to the animal a series of shapes from one object, corresponding with the series of cells in the

combs that they construct. And if bees and other insects are so instinctively impelled in their pursuits, it may be concluded that other animals are in a corresponding manner also impelled. The texture and temperament peculiar to the frame of each animal, moreover, largely aid and influence the development of its particular instinctive inclinations and powers.

The difference in mental capacity among different individuals in the human race, is very considerable. All animals of the same species appear, however, to be nearly, if not entirely, on an equality. All birds and bees seem to possess the same degree of capacity for constructing their cells and nests, which they do without instruction, and without any apparent distinction as regards the skill displayed in the making of them.

Animals are in the highest perfection, having all their powers and instinctive endowments most fully developed, when in a wild condition, or that which is to them a state of nature.⁵ Domestication at once debases and degenerates them. Man, on the other hand, is in his least perfect condition when in a state of nature; and the higher civilization advances, the more fully do his powers become developed. Indeed, mankind seem hardly capable of existing without both civilization and society. They are born destitute of clothing, which is nevertheless necessary for their protection; and their hair and nails require artificial curtailment to prevent them becoming an inconvenience. Animals, on the other hand, are injured instead of benefited by civilization, and many of them prefer to exist in solitude to living in society. They are provided by nature with proper clothing, and have no artificial wants to supply. By being domesticated, their instinctive powers become greatly deteriorated.⁶ In this condition, however, they have less need of them; and from their being thus degenerated and deadened, they suffer much less than they would otherwise do from the cruelties to which they are too often subjected. Man is the only animal that can live in nearly every climate. This is owing, not to his natural con-

⁵ *Captain Cook*, who had the fullest opportunity of seeing wild animals in their natural state, and who was gifted with singular powers of observation, remarked on the extraordinary instinctive sagacity of different animals while in this condition; more especially the bears of Terra del Fuego, which were watched by the natives for discovering the properties of certain medicinal herbs, and both applying them to their wounds, and for the cure of internal disorders.—*Cook's Voyages*, vol. vi. p. 2170.

Mr. Darwin, in his *Descent of Man, &c.*, vol. i. p. 36, observes that wild animals instinctively avoid poisons; although domestic animals, whose senses become blunted, often eat poisonous herbs.

⁶ "Natural instincts are lost under domestication."—*Darwin on the Origin of Species*, p. 215. "Familiarity alone prevents our seeing how universally and largely the minds of our domestic animals have been modified by domestication."—*Ibid.*

stitution, but to his capacity of adapting himself to all climates alike. His frame is far less strong than are those of many other animals; but by the power and through the resources of his intellect, he is enabled to more than counterbalance many defects to which he is subject, but from which they are exempt.

Animals seem to resemble man in their moral and instinctive endowments and qualities, in a manner analogous to that in which they resemble him in their outward form. The general principle of organization is the same, but this form varies in its structure, and as to the degree of its perfection, in different animals, and also as to the nature and texture of the material out of which it is constituted: man being, notwithstanding his general superiority already pointed out,⁷ inferior in certain special endowments and powers to some of the lower animals; while the most perfect of them gradually recede from him, both as regard physical organization and intelligent endowment.

Animals have no intellectual curiosity, that is, no interest respecting any matter merely for the sake of possessing information about it, as evinced by man, whose mind is ever eager to drink in fresh draughts of knowledge. The curiosity of animals is, however, excited only by such matters as appear directly calculated to affect them physically, so as to cause pain or injury, or to gratify some appetite. This is to a great extent the case with savages also, who are little better than animals in an intellectual point. Man's thoughts and desires not being confined to his mere animal wants, his curiosity and attention are extended far and wide to all matters around him, although they may not in any way immediately affect him. The excitement of curiosity is caused indeed by the exercise of certain of the emotions, and of the intellectual faculties at the same time, of which latter, animals are destitute. Nevertheless, a trifling curiosity, or one which is roused by any trivial unimportant occurrence, is a mark of a weak and volatile mind, like a shallow lake, which is disturbed by every light breeze that may flit across its surface.

The motions of most animals—of all that are wild or in a state of nature—are easy and graceful, because they are guided solely by sensation or instinctive feeling. Man, on the other hand, although directed in his corporeal actions primarily by the same endowments, has them nevertheless ever controlled and checked by his reason, according to his opinion of fashion, his desire to exhibit himself to the greatest advantage before the world, and the like, which render his gait and manner stiff, and awkward, and ungainly. The more natural any one's manners are, the more graceful do they appear; and they are so much the more suitable to him, inasmuch as they

⁷ *Vide ante*, s. ii. a. 1, p. 28.

originate from the sensations and feelings which belong to his individual frame and constitution. Hence the manners of children, which are the most natural and unrestrained, are generally elegant and easy. True gracefulness of manner consists, not in subduing or superseding Nature by Art, but in Art correcting the shackles and perplexities with which Nature is fettered and disordered, and restoring her to her wonted freedom.

In the case of animals generally, their large amount of instinct assists, and to a great degree atones for, their small amount of intelligence. In the case of man, his large amount of intelligence almost wholly obscures the exertions of his instinct, while that instinct, doubtless, extensively aids the efforts of his intellect.

3. *Spiritual Being the necessary vehicle of Instinct.*

There is another question of deep interest, and which admits of very wide discussion, that deserves here to be examined, as intimately connected with the topics which we have been considering. I allude to the inquiry whether animals are endowed with anything in the nature of spiritual beings, akin to or resembling souls;⁸ and if so, whether these animal or instinctive beings can be supposed to have a future and immortal existence, as is the case with the soul of man, after the body has perished.⁹

If, however, intelligence of any kind, and to any extent, is exerted by any creature, does it not necessarily follow that

⁸ The opinion that animals possess a spiritual being, which exists after the body has perished, appears to have been held by *Virgil*, 4th *Georgic*, l. 220.

And that famous father of the Church, *Lactantius*, allowed to animals everything in common with man, even a reasonable soul, except a sense of religion.

⁹ *Willis* observes that the Platonists and Pythagoreans believed the souls of animals to be an incorporeal substance, part of the universal world, that they were imprisoned in bodies as in sepulchres, and that the souls wandered from one body to another.—*On the Souls of Brutes*, p. 2. (Pordage's translation.)

"According to the opinion of the Hindoos, the corporeal creation consisting of souls invested with gross bodies, comprises eight orders of superior beings, and five of inferior; which, together with man, who forms a class and part, are distributed in three worlds or classes. The inferior orders of beings are quadrupeds, distinguished in two orders; and reptiles, fishes, and insects, vegetables, and inorganic substances. Hence you will see that the lower orders of animals have souls. Only from their grosser forms they cannot manifest the intellectual qualities which are shown by the higher order of creatures."—*Note communicated by Mr. G. M. Tagore.*

such creature must be endowed with a spiritual being of some description or other, by means of which such intelligent operation is exerted, and in which it resides; as it appears impossible that the gross material frame of an animal should of itself possess the power of performing various actions evincing foresight and discretion, if not amounting to actual rationality?

The human soul is probably the type and model of all created souls, as the human frame is the type and model of all created material frames. And as it may be inferred that, according as animal frames resemble and approach to, or recede from, the human frame, as regards the measure of perfection with which they are constructed, is the proportionate degree of excellence which they possess; so, according to and in proportion as animals resemble man in their manifestations of intelligence, may they be supposed to be endowed with a kind of spiritual being resembling that of man.¹

If animals possess the emotions, and passions, and affections, common to man,² surely they must possess a soul or instinctive spiritual being of some sort also, in which these emotions, and passions, and affections, reside, and in which they act, inasmuch as they cannot spring from the material frame only.³ Although in animals all these feelings are excited primarily in the body, yet there must be something beyond the body in which they actually exist. Nevertheless, animals are entirely destitute of any of the more intellectual emotions and feelings which are dependent on mental action or being, and are wholly confined

¹ *Willis* asserts that the soul of the animal, as the inferior soul of man, is material and divisible, and co-extended with the whole body.—*On the Souls of Brutes*, c. ii. p. 4.

Priestley lays it down that if man be actuated by a principle distinct from his body, every brute animal must have an immaterial soul also.—*Disquisitions on Matter and Spirit*, p. 62.

² *Des Cartes* alludes to the sensations of pain, hunger and thirst, as proving the intimate union between the soul and the body (*Medit.* 6); but as animals as well experience these sensations, the same reasoning must apply to them.

Sir Mathew Hale observes that it is impossible to resolve perception, phantasy, memory, the sagacities and instincts of brutes, the spontaneousness of many of their motions, into a principle that this proceeds from the modification of matter; and that they are not explicable without supposing some active determinate power of a higher extraction than the bare modification of matter, or disposition of organs.—*Primitive Origination of Mankind*, s. i. c. ii. p. 49.

³ *Willis*, however, supposed that the souls of animals consist of particles of the same matter out of which the body is formed, but that they are choice, most subtle, and highly active.—*On the Souls of Brutes*, c. ii. p. 6.

Dr. Henry More and *Dr. Cudworth* both held the opinion that animals are animated and directed by an incorporeal soul, not differing in kind from that of man, but only in degree.

to those which, even in the case of man, appear to spring directly from their corporeal endowments.

Memory, and the power of receiving knowledge of any kind, even concerning matter, are concluded in the case of man to be owing to certain mental faculties which the soul possesses. But if animals also possess certain of these powers, although to a less extent, how can we deny them, it may be in an inferior degree, the possession also of a soul, or of some being of a nature correspondent therewith? It might be said, indeed, that, as has already been observed, their intelligence extends merely to gross material topics and objects, and that their memory is only excited by visual material subjects; and that although they see and have sensations of different things, they nevertheless possess, as I shall presently proceed to show,⁴ no essentially intellectual ideas of them. Yet still it appears inevitable that they must be endowed with a soul or spiritual instinctive being, call it by what name we may, through or by which these inferior powers, common with ours as far as they go, are exerted.⁵

Animals hold communication with one another in a certain manner, and to a certain extent, although it appears that they thereby only express sensations and certain feelings; but no actual ideas of any kind are sought to be communicated. If, however, they can utter sounds, they must possess something of voice. And if these sounds are at all varied, and regulated by or according to their wants and feelings, they must possess something of language. And if they can utter distinct and continuous sounds, they surely possess, to a degree at least, articulate language. They have, however, no written language; but in the place of this, outward visible objects may to some extent serve as a natural symbolical language. Most animals indeed can produce sound, although but few animals can so regulate it as to render it articulate, in order to which a certain amount of instinctive intelligence is requisite. All animals can cry, but no animals can talk.⁶ Their language, consequently, does not so much bear relation to the language of rational beings, as to that sort of collateral or auxiliary sensitive language—more instinctive than intellectual, perhaps,

⁴ B. iii c. v. s. 10.

⁵ *Willis* says that if the souls of animals are immaterial, they are also rational; and he remarks, "After what manner in brutes, perception, a discerning or discrimination of objects, appetite, memory, and other species or kinds of inferior reasons, as one may say, are performed, seems very hard to be unfolded." Therefore, he remarks, some have attributed to animals immaterial souls existing after their bodies.—*Souls of Brutes. Science of Brutes*, c. vi. p. 32.

⁶ Or, as *Professor de Quatrefages* well expresses it, "animals have voice, man only speech."—*Report on the Progress of Anthropology*. See also *Leroy on the Intelligence and Perfectibility of Animals*, pp. 72, 73.

even when used by man—which accompanies our ordinary language; and which is even by us, as by animals, not expressed by words, but by modulations of the voice,⁷ and by murmurs, and motions, and gesticulations, which nevertheless serve as distinctly to exhibit the feelings and passions, through the sympathies that they excite, as any words could do, and in many respects far more forcibly. This description of language is, indeed, altogether independent of the ordinary language which we use. It is allied to and springs from sensation, which, as we have seen, animals possess in a much higher order than man does. And as a consequence probably of this, they are correspondingly more perfect in this instinctive language than is man.

It appears to me, therefore, that although animals are undoubtedly destitute of that high order of intelligence which is the prerogative alone of God, of angels, and of man; yet that they are as certainly endowed with an independent and distinct principle of their own, which may be termed instinctive intelligence: and that the subject or vehicle in which this instinctive intelligence resides, corresponding with the soul of man, we should call animal instinctive being. This instinctive intelligence is very inferior to the intellect of man, and differs from it in the mode, and in the degree, here pointed out. The superior, sensitive endowment and organization of animals, especially when in a wild or natural state, are moreover adapted to afford the fullest play to their instinctive being.

The Abbé Condillac urged as a reason against animals having souls, that it would not become the wisdom of the Deity to subject an intelligent spirit to a body fitted only for animal pursuits. But it is not here contended that the souls of animals, although immortal and intelligent, are at all equal in capacity to those of man. As instinct is to reason, so may we infer are the capacities of animals to those of human beings. Moreover, as regards the inconsistency of placing an intelligent spirit in a dull body, this is of not infrequent occurrence in the case of man, many of whose pursuits are little, if at all, more intellectual than those of animals.

Another ground for supposing that animals are endowed with an independent spiritual being, is the fact of their exhibiting proof of dreaming, during which they are occasionally agitated by the various emotions and sensations, if not thoughts also, of which their instinctive nature is capable; but by which they could not then possibly be affected, unless they were gifted

⁷ "With birds the voice serves to express various emotions, such as distress, fear, anger, triumph, or mere happiness. It is apparently sometimes used to excite terror, as with the hissing noise made by some nestling birds."—*Darwin's Descent of Man*, &c., vol. ii. p. 51.

with some kind of spiritual independent being, in which alone such feelings could be excited.

One circumstance indeed, of which we each of us have constant experience,—that we feel pain quite independent of our bodily frames, and that this pain is moreover produced by causes altogether distinct from those frames; although, on the other hand, the affection of those frames may be communicated to and affect the mind, as the affection of the mind may, in turn, be communicated to and affect the body,—appears to be of itself alone sufficient to prove to us, and to convince every reflecting person, that he is possessed of a being independent of his body, which feels, and acts, and is capable of being acted upon, by itself alone. But if animals as well as man are affected in this way, as they undoubtedly are, whenever they experience fear, or grief, or pleasure, independent of any bodily affection; must they not also necessarily be endowed with some being or other independent of the body, and which being must be to a certain extent intelligent, as also of a spiritual nature? And if it be admitted to be of a spiritual nature, is it not also, in all reasonable probability, immortal as regards its existence?⁵

Moreover, if there are existent in the universe great varieties of spirits, as is probably the case, why should not some of them correspond with animal or instinctive, as others do with intellectual, natures? And if souls of an intellectual nature are united for a time to material bodies, why should not souls of a lower order be similarly united? If it be objected that animals cannot be endowed with souls, because, if so, they would be rational like man; it may be replied that, in the first place, the souls of animals are probably far less highly endowed than are those of man, as it may be inferred that there are as many degrees and orders of spirits, as there are of bodies. And, in the second place, the inferior structure of animals as regards what is believed to be the mental organization of the material frame, may be a reason why, even if endowed with intellectual souls (which I do not suppose), they are not intelligent; just as certain men, and more especially in all cases, infants, although endowed with souls equally with mankind generally, are bereft of intelligence if those frames are out of order, or are of very inferior, imperfect, or incomplete organization.

But, it may be inquired, if instinct is mainly dependent on sensation, why should we suppose animals to be endowed with an independent instinctive being, corresponding with the soul of man? And if, on the other hand, they possess an independent instinctive being, why should we suppose instinct to be depen-

⁵ *Willis* indeed expresses a doubt whether we ought to assign souls of the nature of fire to bloodless animals inhabiting the water.—*On the Souls of Brutes*, c. iii. p. 13.

dent upon sensation? To this it may be replied, that the instinct of animals does not depend entirely and solely on sensation, but on the being of an instinctive nature with which they are endowed, corresponding with the human soul, and without which we cannot believe that they would perform many of the most intelligent acts that they do, and which are quite independent of sensation. On the other hand, it is the perfection of their sensitive constitution, which no doubt enables their intelligent being in many respects so fully to accomplish all the various purposes for which they are adapted, in the material world more especially, in the way pointed out, and which are the actions most striking to us. And it may also be inferred that, even in those instances where sensation is not directly exerted, its perfection has the result of quickening and invigorating, as regards its general effects, their instinctive being.

4. *Imperishability the prerogative of Spiritual Essence.*

It may perhaps, however, be objected by some, that to argue that animals as well as man are endowed with spiritual beings or souls, tends to weaken the confidence which we entertain, not only as to the possession by ourselves of spiritual beings, but also as to their immortality, inasmuch as we readily and without difficulty admit and suppose that animal being perishes with the life of the animal; that if we place animal being and that of man on the same footing, we shall be apt to conclude that one is as likely to perish with the body as the other; and that if the being of animals is not immortal, as is now the general opinion, mankind must also be presumed to be in the same position.

In reply to all this, I must first premise that we have no right to impeach an argument on account of any supposed consequences to which it may possibly lead, but that it ought to stand or fall solely and entirely by its own intrinsic merits. As regards, however, the observation that the immortality of man is endangered or questioned by the maintenance of that of animal being, I must contend that the arguments for, or rather the proofs of the immortality of man, are far stronger, and of a much higher nature than those for the immortality of animals: and that although it is very possible to suppose that while the being of man is immortal, that of animals is mortal; yet, on the other hand, it is wholly unreasonable to imagine that if animals are immortal, man can be only mortal. On the whole, and considering the subject fairly and comprehensively, it must, therefore, be concluded that the doctrine of the immortality of man is essen-

tially strengthened instead of weakened, by the maintenance of that of the immortality of animals also.⁹

The main reason, indeed, why the opinion that animal existence, as well as human, is immortal, should tend to the supposition that the latter may be mortal, appears to arise from the circumstance of our being accustomed from our earliest days of reflection, and without any adequate inquiry into the matter, or our having any solid reason for the notion, to believe that animal existence is necessarily mortal; so that we cannot now separate the consideration of the two propositions, and are consequently wont to involve both questions in the same conclusion. Our conviction of the mortality of animals, is in fact stronger than that of our own immortality, and the weight of the former opinion presses down the latter.

In addition to this, I cannot but think that, on examination, it will be found that our main doubts as to the future existence and immortality of the soul in man, have originated in and been supported by the opinion that animals have no future existence. But if we believe in the future existence of animals, we can have no doubt of that of man, as the evidence for the latter is so much stronger than for that of animals. If, however, we disbelieve that of animals, we are led to doubt of, although we may not disbelieve, that of man. And if we reject unfairly the evidence for the former, we must almost necessarily be sceptical as to the latter.

Be this, however, as it may, we have no right to object to animals being endowed with an immaterial and immortal being, merely because such an opinion may be supposed to weaken, although I believe it contributes to strengthen, the proof of man's possessing a soul. Half the errors, both in philosophy and theology, have arisen from the attempt to distort facts, so as to prevent them from squaring with the obvious consequences to which they lead.

The description of the beasts and various creatures mentioned in the Apocalypse as seen in Heaven,¹ and which are also referred to in other parts of Scripture as living in a future state; may be fairly adduced to favour the supposition that animal existence will continue after this life is ended. If, however, it be urged that the animals alluded to in the Apocalypse are totally different to any in this world, and therefore cannot be supposed to be the beings of some which once lived here; it may fairly be replied that as man will assume a totally different form and nature in a future state to that which he

⁹ *Mr. Isaac Taylor* remarks in relation to this subject, "It must indeed be confessed that the argument of the immaterialist, as sometimes conducted, if pushed to its consequences, would go near to imply the immortality of birds, beasts, and fishes, of insects, and of zoophytes."—*Physical Theory of Another Life*, c. xx.

¹ Revelation iv. 6; vi. 1—8; xix. 11.

here bore, so will it probably be in the case of animals also; and that consequently their appearing in a new shape in Heaven, and differently endowed to what animals are on earth, is no proof whatever that they were not formerly here existent.²

In the next place it has been urged as an authority against the supposition that animals possess souls that will exist in a future state, that the Bible in the following passage has declared the contrary. "For that which befalleth the sons of men befalleth beasts; even one thing befalleth them: as the one dieth, so dieth the other; yea, they have all one breath; so that a man hath no pre-eminence above a beast: for all is vanity. All go unto one place; all are of the dust, and all turn to dust again. Who knoweth the spirit of man that goeth upward, and the spirit of the beast that goeth downward to the earth?"³ As far, however, as we can decide anything certain from this passage, it may be inferred, not only that the soul and life of man are the same in their nature and quality with those of beasts, but more than this, that there is actually a spirit or soul in beasts as well as in man. There is nothing whatever that implies that the souls of beasts perish with the body. On the contrary, from it may rather be concluded that their spirits continue to exist after the body has perished, although they descend into the regions below, where they may have appointed and special purposes to fulfil, and which may be to them no place of punishment, but only one suited to their nature, as the inferior parts of the world are to their condition on earth. To dwell in the deep waters, or in woods and caves, which would be a great punishment to man, is to many animals natural and

² The question as to the future existence of animals is raised by *Origen*; also as to whether human souls can be transferred into the bodies of animals (*Works*, vol. i.). *Lactantius*, too, as we have seen,* believed that animals have souls. And on this subject the famous *Archbishop Tillotson* remarked that "the most common and general philosophy of the world hath always acknowledged something in beasts besides their bodies, and that the faculty of sense and perception which is in them, is founded on a principle of a higher nature than matter. And as this was always the common philosophy of the world, so we find it to be a supposition of Scripture, which frequently attributes souls to beasts as well as to man, though of a much inferior nature." The *Archbishop* further remarks that "immortality imports that the soul remains after the body, and is not corrupted or dissolved together with it, and there is no inconvenience in attributing this sort of immortality to the brute creatures."[†]

From certain expressions in the writings of *Bishop Butler*, it may be inferred that he held the doctrine of what he termed "the natural immortality of brutes;" but which he contends "does not in the least imply that they are endued with any latent capacities of a rational or moral nature."—*Analogy of Religion*, part i. c. i.

³ *Ecclesiastes*, iii. 19—21.

* *Vide ante*, a. 3, p. 197.

† *Sermon* 122.

agreeable. So may it correspondingly be as regards the condition of each in a future state.

But as the general nature of animals is so inferior to ours, and as they are adapted only for the gross purposes of a life on earth, even if we allow them to possess a certain independent being corresponding with the human soul, but without its intellectual endowments; it may not unreasonably be contended that they cannot be supposed to be of a nature capable of existing in a future state, and in another world, for which they exhibit no peculiar fitness. And it may be also urged that their spiritual being, if its existence be admitted, is of such a kind that it appears hardly adapted for a separate condition, or for the exercise of their endowments when disunited from those corporeal frames in which all the faculties and powers which they possess seem to reside and centre, and from which alone they must be deemed to spring.

To this, however, it may be replied that, if animals possess the spiritual being here supposed, they must possess it distinct and independent by itself; and that if it is distinct and independent by itself, it surely may have a separate existence apart from the body; and that if it can exist apart from the body, it will probably do so in a future state. Besides which, I repeat, the animal propensities alluded to, although most, but not all of them, spring from the body, are mostly, but not all of them, as far as we can judge, exercised through a spiritual, and, to a certain extent, intelligent being. With regard to the endowments and feelings possessed by animals not appearing capacitated for continuance in a future state of existence, it is to be borne in mind that it is not on account of the exercise or possession of intellectual faculties, that man hopes for reward in a future state; but from the exercise of certain moral qualities, such as benevolence, justice, affection, and the like, with many of which animals are as fully gifted, and as fully exercise them, as man is capable of doing. On this ground, therefore, it might be expected that animals would not only exist in a future state as well as man, but that that future state would to them also be one of reward and punishment. And it may be that the fidelity of the dog towards his master, and the affection and care of the bird for its young, which are unrequited here, will be rewarded in such future state, which, nevertheless, need not be to them as ours will be to us, one of high intellectual enjoyment and glory.

It may also be urged, as regards the future being of animals, that we have no right to contend against it on the ground of their not exhibiting intellectuality and reasoning power; inasmuch as infants, of whom no doubt is entertained by the generality as to their future being, are in this respect but little, if at all, superior to animals. And possibly the same cause, the imperfection of their material mental organs, which restrains

the full development of mental power in infants, may to a certain extent, and in a corresponding manner, do so also in the case of animals.

The consideration that animal being continues to exist after this life is ended, may serve to reconcile the apparent inconsistency, and the apparent deficiency, in the economy of nature of so many animals being ordained to prey upon each other; and also of the allowance by Scripture of so large a sacrifice of animals for the food of man, and for burnt-offerings upon the altar; as it appears extraordinary that their existence should be doomed so early to be cut short, especially in the case of young animals, who were peculiarly appointed for sacrifice. If, however, a future existence is granted to them, the difficulty is at once obviated.

It may perhaps, however, be further objected against the notion that the being of animals is destined to exist in a future state; that if, as I have suggested in a previous section, only certain souls of men will so exist,⁴ it is contrary to reason to suppose that the beings of all animals will do so, which is, in fact, rendering their condition superior to that of man. As regards this subject, although the being of man is undoubtedly far higher than that of animals, both in its present and its future state; yet God, who created the soul, can, if He sees fit, surely terminate its existence at His pleasure. In this respect it differs from animal being, which seems capable of neither enlargement nor diminution by the treatment that it receives, and so far appears less liable to annihilation than the soul of man. Probably, indeed, the existence of the soul in reference to animal being, is analogous to the condition of each on earth: and while animal being is independent of cultivation, both for its operation and future existence; the soul of man, as it is dependent on cultivation for its improvement and development, so it is also dependent on the use that it makes of its opportunities on earth for its future existence. In other words, as a man wholly devoid of intellectual cultivation is in many respects actually lower in the scale of intelligence than an animal, so may he be also less adapted for immortal life; and as man is dependent on his own efforts for attaining intellectual development and power, so may he be dependent on them also for attaining immortality; while animals in each case, without any effort of their own, attain a middle rank or condition.

From what we may observe of certain animals, beasts and birds, as well as reptiles, and fishes, and insects, exhibiting no signs of disquietude or alarm while some of their species are being killed before their eyes, so long as they afford no token of suffering pain, although they are easily aroused and excited

⁴ *Vide ante*, s. v. a. 5, p. 104.

by any appearance of danger of immediate pain, as where they see one of their own species beaten or attacked by a strange animal; we might be induced to conclude that animals in general are imbued with an intense dread of, and desire to avoid physical pain, but with no dread of, or desire to avoid, because no notion whatever, of death. On this theory, moreover, it appears that alone is explicable, that extraordinary courage, or rather recklessness, which flies and other animals frequently display, exhibiting an utter contempt of death, although of physical pain of any kind they never fail to evince their horror. It would almost seem, indeed, that their excessive instinctive fear of pain, extinguishes, as it were, the fear of death; the one apprehension precluding the necessity of the other, and allowing of the dispensing with it altogether.

The universal spread of animal life everywhere throughout our globe—in the air, and in the water, as well as upon the earth, and on the bodies of each animal and plant—affords strong presumption that it exists in other spheres, and in other states, besides those with which we are immediately acquainted. The immense variety also of animals, and their extensive and multifarious uses in the economy of nature—every department appearing to have its peculiar inhabitants and requisites, and to be completely provided for through the agency of certain animal existences—corresponds, moreover, very exactly with what we know of the spiritual world, where various agencies and operations are carried on by ministering spirits of different kinds. And the limited general powers of animals, co-existent with the exquisite perfections of each in some peculiar especial departments, corresponds also with what we might suppose to be the nature of the capacities and endowments of spirits, who would be employed in different agencies connected with the economy of the spiritual world, each serving to perform some particular function, and to fill some peculiar department, but without being required or capacitated to perform more general or exalted undertakings. As the material world in many respects reflects, as it were, or is typical of the spiritual world; so in this, as in many other characteristics, may the life that now is, reflect or typify that which is to come—animal being serving analogous uses in the one state, to what it does in the other. Indeed, as it is possible that in this life the existence of animals among us is intended by God to answer some important moral and intellectual end; so in a future state, in a corresponding manner, may their spiritual existence be also required. There appears, however, no reason to suppose that in their future condition any reunion of their earthly frames to their spiritual beings will take place. The moral use to us of animals now is, moreover, probably as great and as varied as, and corresponds with, their physical use. But if they have a

moral use in this life, may they not have a moral use also in that which is to come? And if so, their existence will be required equally as much then as it is now, and will consequently, no doubt, be ordained.

As regards the existence and spread of vegetation, we do not by any means find these so universally as we do animal life. Nor is there apparently in vegetables any sort of being, apart from the frame of the plant, which might serve as the substratum, if we may so term it, of independent separate existence, instinctive or intelligent, when that frame is destroyed, and through which its continuance might be carried on independent of that frame; so that, in fact, the very same reasons which would lead us to conclude animal life to be fitted for continuance after the destruction of the material frame in which it subsisted, would lead also to the conclusion that vegetation perishes at once on the destruction of the frame to which it is annexed.

If, however, plants are supposed to be existent in other worlds; and if it is believed that they are generally inhabited by beings endowed with life; this also affords presumption that life generally, including that of animals as well as of man, exists in other worlds besides our own; and if so, why not in that future state to which man is hastening?

5. *Instinctive independent of Moral Intelligence.*

It may, nevertheless, be objected to the opinion of animals, or animal being, existing in a future state, that it is altogether unreasonable to suppose that such a condition would be allowed to them, inasmuch as they are endowed with no sense of religion, and appear to have no notion of a Supreme Being; besides which, they are gifted with no actual moral sense, and possess no notions as to the goodness or badness of actions; and consequently do not exist here, as in the case of man, in a probationary condition, for man's conduct in which he is to be rewarded or punished hereafter, and which is reasonably believed to be one of the main purposes of his existing in such a state.

In reply to the above objections against the future existence of animals, it is an undeniable truth that a vast number of our own race have no sense of religion, and that the people of some countries possess no notion of a Supreme Being; yet it has never been supposed on that account that they were not endowed with souls, and were not destined for a future state of existence. Animals, however, like man, may be taught to obey a being superior to them, analogous to the religious duty of man; and in this obedience they are ordinarily far more regular than man is

in his religious obedience.⁵ It may also be observed, that although the opportunity of rewarding or punishing mankind according to the deeds done by them on earth, may be one object in allotting to them a future state of existence, it is not the only object; and that it is even possible to suppose that many human beings might so pass through their terrestrial career as to have done nothing by which to merit, in strict justice, either reward or punishment, any more than a mere animal. Indeed, animals, although they may not attain to any very great extent of moral excellence, such as is reached by man, yet, on the other hand, they do not descend so low as man in the scale of moral depravity. Animals frequently perform actions essentially bad in themselves, but they can never be said to perpetrate actual wickedness. Besides, being destitute of conscience, whose office is to restrain, and whose testimony aggravates every offence of man, their real culpability must in all these cases be adjudged to be far less than his. But in certain animals, dogs and horses more especially, a principle akin, or at any rate analogous to conscience, is clearly perceptible, as when they evince shame for breach of rule. This proves still further that animals are not merely capable of being taught obedience to a superior, which forms the basis of religion; but that they are not destitute of all capacity for religious cultivation, and are, consequently, not on this account wholly disqualified for existence in a future state.

Man is apt to reproach the animal creation with living entirely for this world, without any reference to, or preparation for another that is to come. Might not the animal creation with reason retort upon man, that he is so absorbed by covetous desires and the concerns of business, that he not only neglects all preparation for eternity, but actually disqualifies himself for it? And that in addition to this, he not merely loses all hope of happiness in Heaven, but even deprives himself of all real enjoyment, such as animals in a state of nature partake of to the full, while on earth?

It may, therefore, be inferred that the co-existence of animals upon earth with man, is intended by the Creator to serve some great moral purpose as regards the latter. Remarkable, nevertheless, it is that a large portion of the crime committed by man, is done either in relation to, or in connexion with, the animal world; as in the case of gluttony through feeding upon them, in that of pride in the

⁵ *Professor De Quatrefages* remarks that so far domestic animals are religious, in that they readily obey those who correct or indulge them, and that animals fly to man for protection as a believing being does to his God.—*Report on the Progress of Anthropology*, pp. 85—87. "A dog looks on his master as on a god."—*Darwin's Descent of Man*, vol. i. p. 68.

vain use of the clothes which they supply, or in that of cruelty in our conduct towards them. Without extravagance, therefore, might it be conjectured that their spirits will be permitted and ordained to avenge on ours, what from us their bodies endured.

Moreover, when we bear in mind that all the animal or medial propensities and feelings possessed by man, are developed in the highest perfection in animals; is it unreasonable to infer that these endowments have their representatives in the spiritual world, in the beings of animals distinguished in this respect, who might there perform functions corresponding to those which animals themselves effect in the terrestrial world, in relation to man?

We can hardly doubt, therefore, that if animals exist in a future state and apart from their bodies, they must be endowed with some being corresponding to the soul in man, and in which resides their instinctive intelligence, and all its properties and powers. And, on the other hand, if animals possess this independent being, there is every reason for expecting that they will exist in a future state. Animals, like man, must consequently be endowed with two distinct parts, a material corporeal frame, and a spiritual instinctive intelligent being, although, like man, they may not be capable of rational or moral exercises. And it appears to be not only highly probable, but in strict analogy and accordance with the general order of nature, that as it may be inferred that there is as great a diversity of spirits as there is of material substances, as we know indeed that there are several orders and degrees of the former; so for certain wise ends, spirits of the lower kind may for a period be united to animal bodies, and afterwards exist separate from them, to serve perhaps, in a corresponding manner, in the economy of the spiritual, as they have done in that of the material world. The circumstance, indeed, recorded in Scripture of the devils beseeching our Lord to send them into the swine after He had cast them out of the man who was possessed, and their entry into those animals, which were of the species moreover peculiarly accounted unclean among the Jews, might not unreasonably be urged to favour the supposition that there is a connexion between the souls or beings of animals and certain spiritual beings of the higher order.

If it be objected to animals being endowed with religious notions in a future state of existence, because they had none on earth; it should be borne in mind that their career on earth is not intended to be a probationary condition, inasmuch as they are all alike destined for the same state of existence as regards their future being, which will probably be neither one of perfect happiness nor complete misery, but merely one of tranquillity and comfort, intermediate between those two conditions, fitted for beings who have done neither good nor harm, but have a certain purpose yet to fulfil. As regards the descriptions of

animals contained in the Apocalypse, who are represented as joining in homage to the Almighty; although these are in many respects and to a great extent allegorical, yet even here what is allegorical has its foundation in reality.

Angels appear to be, as it were, the exact opposite or counterpart of animals: for as animals are wanting in mental and moral endowments, but possess sensation, and appetites, and passions; so angels are supposed to be wanting in sensation, and appetites, and passions, but to possess endowments of a mental and moral nature. Man alone, of all beings that we are acquainted with, is gifted with the endowments common alike to angels and to animals; having not only those that are mental and moral, but others which are properly termed medial, being of an intermediate order, as common also to most animals, and indeed to other organized beings.

What I would conclude on the whole to be the case with regard to the future existence of animals, is as follows:—Their spiritual being or intelligent principle, corresponding with the soul in man, will continue to exist after the body perishes; but as their life on earth is not one of moral probation, so their future condition will not be one of reward or punishment, of exclusive happiness or misery, except so far as these states result from the complete development and exercise of their respective spiritual endowments. That condition, it may therefore be inferred, will be one of mere existence only, in a state of tranquillity and ease, in which they will fulfil their several parts and offices in relation to man, and other beings around them, in a manner corresponding with that in which while on earth they supplied those uses and those requirements.

The entire subject is, nevertheless, perplexing, and solemn, and enveloped in dense mystery. Conjecture is all that we can exert to effect its solution, although even here the reason may to a large extent aid us, and may in certain instances supply some clue to guide our path. If the various matters that are passing in the world ought to excite the efforts of the mind in proportion as they affect our interest or our welfare; in a corresponding manner should abstract topics of speculation and inquiry engage our attention so far as they contribute to inform us of our real nature and position, and to direct us to the fittest mode of conducting our course through life, in the application of the powers which we possess, and in turning those powers to the best and most profitable account. The attainment of this knowledge constitutes at once the end of all rational inquiry, and the ultimate result which the highest of those powers is capacitated to attain. Unsatisfactory, and even melancholy, as the reflection may be, the utmost success in our researches serves, nevertheless, rather the more completely to convince us of our ignorance, than to exalt us from any consciousness of our acquirements.

BOOK I.

THE MEDIAL NATURE AND CONSTITUTION OF MAN.

CHAPTER I.

SENSATION.

1. *Constitution and Adaptation of the Sensorial System in each Organized Frame.*

ON entering upon a particular investigation of the several powers and endowments belonging to the constitution of man, we must commence with those that are most nearly connected with his material frame. The properties of this class which are embraced by the present book of this Treatise, appear to me to be correctly denominated as "Medial," being entirely of that middle or intermediate nature, strictly essentially and exclusively, neither animal nor material, nor entirely either physical, moral, or intellectual. They cannot, indeed, as a class, be rightly termed animal, inasmuch as of certain of them animals do not partake. They cannot be termed material or physical, because they do not exclusively either belong to, or arise in the body. They are not strictly moral or intellectual, as beings who have no endowments belonging to this part of our nature, are fully gifted with them. The medial endowments, however, reside in, or arise out of, certain properties, common to each of these several parts of our system. Their main and special characteristic is therefore of a middle or intermediate kind, between animal and intellectual nature; although belonging entirely strictly and properly, to neither alone, but appertaining in part to each, and being essentially of a mixed order.

As the dark and deep recesses of the earth from which the light of heaven is obscured, serve us for viewing the planets in the day-time, whose glories are then dimmed by the glare of the sun's rays; so the investigation of the lower departments of man's nature, will oftentimes conduce to throw light on many points connected with his higher and intellectual constitution, which, by attention to the latter alone, would pass unheeded, or be discerned but incorrectly.

To the material frame of every organized animated being, as has been already pointed out,¹ certain powers, or endowments, or energies, of various kinds and degrees, appear to be an-

¹ *Vide ante, Prel. Diss. s. ii. a. 3, p. 32.*

nexed, which serve to confer upon the being gifted with them some special qualifications peculiarly and essentially adapted to his nature and situation. Of these are the faculty of locomotion, that of acting upon matter in different ways, of propagating the species, of self-defence, of uttering sounds, of self-sustenance by absorption of matter, of voiding matter from the frame, and of maintaining a communication in various modes with the different objects around it. These several powers or endowments may therefore be divided into two classes, comprising,—1. The active powers; 2. The passive powers. These powers may again be divided into those which are voluntary, those which are involuntary, and those which are of a mixed kind. The active powers include all those already enumerated except the last, that of holding communication; some of the operations of which are active, others passive. As regards the whole of these powers, save those relating to sounds, and to external communication, the consideration of them comes rather within the province of the material physiologist than the mental philosopher, and consequently their investigation forms no part of the present work.

The various powers annexed to an organized animated material frame, by and through which it is capacitated to hold communication with objects around it, are severally calculated to enable the being endowed with them,—according as they are respectively one or more of them possessed by such a being,—to observe the objects in question, to take notice of their movements, to perceive certain of their qualities, and to ascertain the nature of their substance. They are commonly termed the senses; and together comprehend the power of Seeing, that of Hearing, that of Feeling and Touching, that of Tasting, and that of Smelling. All the senses, however, originate in that of feeling, and might indeed be contended to be only varieties of that sense. Thus, even Seeing consists, to a certain extent, in feeling the rays of light full upon the retina of the eye; Hearing in feeling the motion of the air acting upon the ear; Tasting and Smelling in feeling by their respective organs certain properties of matter indicative of the qualities of certain substances. As these senses, however, severally extensively differ both as to their application and use, I have considered them under this their ordinary division.

Sensation is the power possessed by the material frame, or by some part or organ belonging to it, of receiving the impression, reflection, or image of any object, independent of the object itself; just as a mirror receives the shadow of a tree, without obtaining or retaining a particle of its substance.² Perhaps indeed, the higher and more intel-

² *Zeno* held that sense is a spirit proceeding from the supreme part of the soul, and permeating to the organs.

lectual the particular sense is, as in the instance of sight, the more strictly is this the case; while in smelling, which is the lowest of all the senses, we do obtain or imbibe some of the effluvia springing from, if not actual particles belonging to, the subject of sensation.

Sensation is not, however, like life, a distinct and independent principle in itself, but is the mere result of life and organization. The senses serve as a medium of communication between the soul on the one hand, and external material nature on the other. The senses are in relation to our communication with matter, what language is in relation to our communication with ideas. Thus, the senses enable the mind to hold communication with matter through the sensations they experience, but which very imperfectly represent the actual and essential qualities of matter, such as the mind, if it could obtain direct communication with it, might receive; just as language serves to convey but the shadow of the subjects it describes, much as it aids our knowledge of them, and an acquaintance with which pure spirits may probably obtain in a direct and complete manner.³

The senses, moreover, all act from external objects towards the soul. In no case does sensation proceed from the soul towards external objects. That sensation is actually experienced in the very organ itself, not in the brain, is evident from the circumstance that any change in the object of sensation affects the particular organ, and not the brain. The brain is merely the vehicle by which the sensation is conveyed to the soul from the organ, as the organ conveys it to the brain. As regards however the operation of such sense, there must be a medium of communication between the object of sense and the sense itself, in order to produce sensation. In many respects the nervous fluid or ether,⁴ appears to serve as a medium of communication between the senses and the soul, by means of which the most gross material substance, and pure, unsubstantial, if not essentially immaterial being, may be said to find a point of junction.⁵ Indeed, the senses themselves

According to *Aristotle*, the external senses perceive objects, but it is the common, or internal, sense which observes the difference.—*De an.* l. 3.

Plato held sense to be the passive perception of the soul, through the medium of the body.—*Theæt.* p. 186.

Des Cartes, however, says that bodies are not properly perceived by the senses, nor by the imagination, but by the intellect alone.—*Meditat.* 2.

³ *Locke* terms the entrance of an idea into the mind sensation.—*Essay on the Understanding*, b. ii. c. 19, s. 1. It appears to me, however, that sensation is a process which precedes the entrance of an idea into the mind, and is that from which ideas of external objects spring or are derived. *Vide post*, book iii. c. ii. ss. 1, 2.

⁴ *Vide ante*, *Prel. Diss.* s. ii. a. 4, p. 39.

⁵ *Sir Isaac Newton* in his *Principia* lays it down that "all sensation is performed, and also the limbs of animals moved in a voluntary manner, by the powers and actions of a certain subtile spirit—that is, by the vibrations

might be deemed to constitute the bridge or link between mind and matter.⁶ Thus, while Seeing and Hearing are, in reality, pure acts of the mind, so far as these sensations are communicated to the soul; yet the causes of these sensations, such as the object viewed or the sound produced, are of an entirely material, and indeed gross nature.

In the case of sight, more particularly, it would seem that there is an intellectual sense almost distinct from, and independent of the material one, or its organ, which is in reality only the servant of the other, as regards its communication with the external material world. Thus, when we are in the dark, and the material organ of vision ceases to act, the intellectual sense rouses itself into full activity, although it had before that been dimmed by the glare of the images constantly presented by the material sense; in the same way as the light of the sun serves to obscure the view of the planets, which, when this luminary has set, shine forth in full splendour. It is probably from the circumstance of the intellectual vision being the most important and powerful branch of this sense, that blind people do not suffer more from the deprivation of sight. Of hearing there is also an intellectual branch, although not so powerful as that of sight. Feeling, tasting, and smelling, being wholly material in their essence, have probably no intellectual branch. If they have, it is but feeble, and seldom exerted.

There are, consequently, not only spiritual as well as material senses, but the latter are merely the organs of the former; and the existence of the former is often more palpable than that of the latter. Indeed, it is only from our being immersed in matter, that the perception of the spiritual sense is clouded from our view. During sleep, the spiritual senses mainly are exerted. And even if we merely close our eyes, we soon perceive the vigour and activity of the spiritual vision.

A question might indeed be raised, whether the senses themselves essentially reside and operate in the soul, or in the body.⁷ On the whole it appears to me that it is in the soul, in the case of man, and in the instinctive being, in the case of animals, that sensation itself, even independent of the ideas which spring from it, in the manner I shall hereafter point out, really and essentially resides; and that therein all operations in relation to it, as regards the reception of sensations, are

of this spirit, propagated through the solid capillaments of the nerves from the external organs of the senses of the brain, and from the brain into the muscles."

⁶ *Vide ante, Prel. Diss. s. vii. a. 1, p. 124.*

⁷ *Buffon* remarked that man has, like animals, a material sense, and also one of a nature highly superior, which resides in the spiritual substance.—*Natural History: Nature of Animals.* He also considered that animals have, in common with men, an interior as well as an exterior sense, but that in animals the interior sense is entirely material.

carried on : also that the material organs, called the Senses, are but the instruments, or agents of the soul in these operations, being themselves wholly inanimate, and receiving all their vivacity from the impulses of the soul. Hence, no being which is not endowed with either soul or instinctive intelligence, can be gifted with sensation. And even in such beings, when the connexion between the soul or instinctive principle and the material frame is broken, as happens during sleep and insensibility,⁸ sensation also at once ceases. Moreover, when we obtain the idea of any object, as a man, or a horse, not by the senses perceiving it, but by the name of it being mentioned, and the recollection recalled, it is surely the mind, and not the senses, which perceives the object. In all the efforts too which are made by the imagination, the soul itself, and by itself, perceives the subject present to it, without the aid or intervention of the sensorial organs. And if the soul is the perceptive being in these latter instances, may it not be so in those of sensation as well ?

Hence also, no valid objection can be raised to the separate existence of the soul, and its independent action as an intelligent being, on the ground that in a future state it will be deprived of the aid of the material senses, which now so greatly contribute to many of its most important operations ; inasmuch as these senses are needed rather for the body than the soul, and they become requisite in consequence only of the soul's being united to a material frame. For surely, if the soul is capable of being united to a gross material frame, it must necessarily also be qualified to take cognizance of gross material objects when it is in a separate state, and would then receive sensations, or rather ideas, directly from them, instead of through the senses, or sensation.

Our senses are, indeed, very imperfect and limited, even as regards those particular subjects for which they are best and peculiarly adapted. To mankind, in the middle state of being, between matter and spirit, in which he is placed, a sort of mediocrity, or mediality, in the condition of every subject, appears to be essential, in order to render it cognizable to our senses. Owing to the peculiar constitution, and to the slowness in action of some of our senses, we are unable to perceive many objects ; and indeed can only either see, or feel, or endure, those which are in a sort of middle state as regards their size, the celerity with which they move, or the degree of heat or light appertaining to them. Thus, as regards sight, all objects which are either of extreme minuteness, or beyond particular dimensions, or which are not at a certain distance from us, or moving at a certain pace, or of a certain density or opaqueness,

⁸ *Vide ante, Prol. Diss. s. viii. a. 2 and 5.*

are excluded from our vision; and even of those which we see the plainest, we perceive only their external and superficial, and not their internal or essential qualities. The light also in which we view them, must neither be excessive so as to render it dazzling, nor too limited so as to produce obscurity. If motion is either very slow or very swift, it becomes imperceptible. So heat and coldness of a moderate kind only, are endurable by us. The extreme of either proves destructive to our frames. And those sounds alone which are of a medial extent, are perceptible by the ear. This limitation of the power of the senses exists more particularly with regard to those senses, such as sight and hearing, the prominent purpose of which is to enable us to hold intellectual communication with other persons.

This sensorial defect, if it may be considered as amounting to such, is probably owing to the constitution and nature of our organs of sensation, and arises from no deficiency in our mental constitution independent of them. Spirits who are independent of bodily organization as regards sensation, in all these respects have, probably, an immense advantage over us, alike as regards capacity, action, and endurance.⁹ Nevertheless, who among us is there that can venture to assert that this mediality in the power of the senses, more especially as regards our limitation as to the sight of objects of a particular size, and which are moving at a particular rate only, may not be expressly ordained in this life, to shut us out from intercourse with beings of a different order to our own, gifted probably with a superior intelligence, who move about and around us, but who are not discernible to us now, because our senses are unfitted and incapable to discern them.

As our senses are not capacitated to take cognizance of any of the qualities of spirits, so it is possible that there may be also many qualities in matter of which they are not capacitated to take cognizance, and with which, therefore, in our present condition, we may never become acquainted. Indeed, of some material substances themselves, which are immediately connected with us, such as the animal spirits, and the nervous ether or fluid, we can acquire no knowledge by the senses. Spirits probably see objects at once, without the hindrances which perspective distance causes to our senses. The real essences of subjects may be also perceivable by them, and even spirits themselves must be visible to spirits.

The ultimate object and use of the senses, is not so much to enable us to discover the nature, much less the real essence of any subjects; as to enable us to discern their real use to us, their available properties, whether beneficial or baneful.² And

⁹ *Vide ante, Prel. Diss. s. vi. a. 1, 3.*

¹ *Vide ante, Prel. Diss. s. vi. a. 3, p. 115, a. 4, p. 118.*

² *Malbranche* asserts that the senses do not represent sensible objects

as the senses of man are especially adapted to fit him for the material world, so the material world is especially adapted to the senses of man.

As regards his active physical powers, already alluded to, man is nevertheless, for the most part, much below the average, compared with other created beings.³ His capacities of locomotion are inferior to those of the generality of animals, and are unequal to those of many birds and insects. His capacities of self-defence, are, in proportion to his size, less efficient than those of all carnivorous animals, as well as those of the generality of birds and insects. His internal passive capacities, such as those of digestion, are also inferior to those of numerous animals. And as regards both the strength and acuteness of his senses, he is below most, if not all of them. Through his mental capacities and acquirements, however, each man obtains not only the natural active physical powers of several different animals, but man, in the aggregate, possesses the powers of the whole animal creation together. Thus, by his invention of railways, he excels the swiftest of them in locomotion; by that of steam, he becomes the most powerful in his operations upon matter; by means of ships and balloons, he can traverse both water and air, far beyond the limits of any animals; and all the elements of nature are turned to avail to protect him against assault, and to supply him with the various conveniencies and necessities of life. And as men, unlike animals, act in concert together, communicating to one another the discoveries and resources of each; what one man only finds out, becomes available by the whole family of man.

Man is moreover endowed with one material organ termed the hand, which is the leading instrument in most of his active physical operations, and which is superior to any organ that animals possess. This organ is, indeed, so perfect in its construction and adaptation, as to serve efficiently as the instrument at once both of the body and of the mind, administering alike to the wants, and impulses, and desires of each; and, of itself, it almost seems to place man, even as regards his physical capacities and powers, at the head of created terrestrial beings, and contributes much to establish his dominion over them all. So finely constructed is this wonderful organ, and so perfect is its mechanism, its nerves and muscles communicating with, and receiving their impulses from the very seat of the soul, that its education is controlled and directed by the mind. In many animals, the mouth performs most of the functions requiring the greatest dexterity, which man effects by the hand. From this latter organ

as they are in their own nature, but as they are with reference to the preservation of our health and life.—*Search after Truth: Illustration.*

³ *Vide ante, Prel. Diss. s. ii. a. 1, p. 28.*

serving him as the active agent in his physical operations, the head is left at liberty to be applied to higher efforts, and the abode of the soul is thus undisturbed by active collision ;—the seat of empire and of rule is consequently secured from martial turmoil.

Nature, moreover, seems to have afforded some compensation to the soul for the restraints and incumbrances under which she has placed it while united to the body, by endowing the latter with organs of sensation perfectly and wonderfully adapted for this purpose ; by means of which a constant, and vivid, and easy direct communication is maintained between the soul and material objects. In some respects, indeed, it is not impossible that the soul may be actually benefited by its union with the body, inasmuch as it is thereby enabled to acquire, in this manner, a knowledge of material subjects, their nature, and mode of operation ; which, we may infer, it could not have effected, at any rate so completely, as an independent spiritual being unallied to any corporeal frame.⁴ The senses thus serve to supply food to the soul ; and some of its most valuable matter for contemplation, is doubtless communicated to it through them. Neither art nor science could have been invented, or carried on, independent of sensation. On the other hand, the influence of the senses has, in many respects, mainly tended to the degradation of the soul ; and most of the indulgencies and pursuits which have contributed the largest share to its debasement, are those which are termed sensual.

Animals appear to be endowed with senses generally in much greater perfection than man, which is even the case with domestic animals as well as with those in a wild state ; which latter, being the true condition of nature, is that wherein all their proper functions are most completely developed and carried on. Perhaps, indeed, the main difference, as regards sensation between men and animals, may be this ; that while certain particular animals possess certain particular senses in far greater perfection than does man, man is endowed more largely with a number of them together, than is any individual animal. A result is produced by this circumstance, analogous to that occasioned by the joint possession together, to a moderate extent, of a number of intellectual faculties and capacities, as compared with the extensive endowment with only a very few of them ; as will be pointed out in a subsequent book of this Treatise.⁵

In addition to this, the senses of animals are left more entirely free to act than is often, or indeed ever the case with

⁴ *Vide ante, Prel. Diss. s. vii. a. 1, p. 124.*

⁵ *Vide post, book iii. c. i. s. 7.*

those of man ; the natural course of which is constantly diverted and interfered with by the operation of the intellectual faculties, through which their impressions are blunted or perverted. Thus, with regard to objects which we take cognizance of by the eye, the reason frequently influences our decision concerning them. So also of objects perceived by the other senses.

Certain animals appear to be gifted with senses, which, from their extreme acuteness and delicacy, are capable of ascertaining the minutest qualities belonging to material objects, for which our own senses, from their comparative grossness, are quite unfitted. Thus, some insects whose general nature and endowments are in all respects far inferior to our own, have so refined and nice a perception of the nature of the atmosphere, and are able so accurately to discern its mutations, as to perceive at once the approach of rain. In a future state, when united to a spiritualized but duly organized body, it may be inferred that we shall be thus perfectly endowed in a corresponding manner ; and for which purpose it is probable that no senses actually new may be required, but only the extension and complete development of those which we now possess. How great a change in our condition as regards the extensive and immense variety of objects which we should then behold, embracing perhaps the numerous concourse of the spiritual world, and the very different and extraordinary aspect which objects now common to us would present from their real and essential qualities being immediately discernible, would be produced by this circumstance alone, it is wholly impossible to determine, or even to calculate. Conjecture here is indeed lost in endless speculation.⁶

Moreover, as the limited operation of our senses as regards their power, already referred to, is entirely owing to the nature of our material frames, and does not arise from any thing in the senses themselves, so far as these senses are existent in the soul, or from anything in the soul itself ; so in a future state of the soul, when existent in a separate condition, or when united to a spiritual body fully capacitated for all its efforts, this limit in its operations will no longer be imposed upon the soul, which will then be completely adapted for far higher pursuits and exertions, even as regards the reception of sensations, and the perception of objects and beings, than any to which it can now aspire.⁷

Through the benign economy of Providence, in all animals and creatures capable of, and directed or influenced by sensation, the nature of the senses, and the construction of the

⁶ *Vide ante, Prel. Diss. s. vi. a. 5, p. 119.*

⁷ *Vide ante, Prel. Diss. s. vi. a. 3, p. 115.*

sensorial organs, appear to be contrived and disposed in the manner most exactly suitable to their condition and exigencies. Probably, however, the more acute and perfect are the lower senses, the lower in the scale of animal being is the individual so endowed.⁸ Nevertheless, some animals, such as eagles and owls, have the higher senses, such as sight and hearing, apparently more powerful and acute than man has, although they may not be so perfect, so varied, or so accurate.

Sensation may perhaps be deemed to be the characteristic mark or feature which serves to determine the boundary between the animal and vegetable orders of creation. Vegetables, nevertheless, do possess certain senses, to a limited extent, in common with animals.⁹ Some of them evince sensation of touch, and all of them that of feeling, so far as their capability extends of being affected by heat and cold, dryness and moisture. Light also, which we consider as annexed to the sense of seeing, in an important manner excites plants, and indeed, in many respects as directly and powerfully as vision does animated beings. Plants are also affected by odours, which act upon animals through the sense of smell. Vibrations in the air, which produce sounds in the ear, influence plants as well; although perhaps, in their case, it is rather the sensation of feeling than that of hearing, which is actually excited. A certain sort of taste would also appear to appertain to plants, if we may judge from the result of this sensation in their preference for particular soils and substances from which to draw nutriment. Moreover, laceration in the frame of a plant will sometimes occasion physical contortions, corresponding with those which accompany the excitement of the sense of feeling in an animal frame.

As regards the economy of their organic construction, plants appear, in many respects, to be as perfectly capacitated for sensorial communications from external objects, as are animated bodies; and doubtless some plants are as completely adapted in this respect, as are some animals, while from certain of their operations, it appears impossible to deny them the possession of a limited amount of instinctive intelligence as well.

⁸ *Mr. Darwin* observes that "spiders are possessed of acute senses, and exhibit much intelligence."—*Descent of Man, &c.*, vol. i. p. 338.

⁹ *Sir J. E. Smith* suggests that as vegetables possess life, irritability, and motion, the exercise of their vital functions may be attended with some degree of sensation, however low.—*Introduction to Botany*, p. 3. He also suggests that, as a consequence of this, vegetables may experience 'some share of happiness,' however low.—*Introduction to Botany*, p. 3.

In *Belshaw's Elements of the Philosophy of the Human Mind*, are contained a number of arguments in favour of the percipient power in vegetables.—Pp. 186, 187.

Dr. Priestley expressed it to be his opinion that the doctrine of perception in vegetables was "a theory established."—*Memoirs of J. Priestley*, Appendix 2: *Metaphysics*, p. 316.

If indeed vegetables are affected by the causes and appliances alluded to, so as to be excited by them to action of any kind, they must, surely, be endowed with some sort of sensation. And if there are certain particular parts or members appertaining to them which are peculiarly or solely affected in this manner, we may regard these as the sensorial organs of such plants. It is, moreover, to be remarked that the influences and agents which peculiarly excite our own sensorial organs, such as contact, light, cold, and heat, are the influences and agents which peculiarly excite the sensitive members, or organs, of plants.

But if plants are capable of experiencing sensation, they will also exhibit a preference for certain substances and elements over others, and will cling to and be attracted by some, while they dislike and are repulsed by others, in which instinctive intelligence alone could direct them. And this they evidently do, as when they evince a choice for one sort of soil above others, or a repugnance to particular soils and substances; as also in their desire for light, by eagerly turning towards it, and their love for heat and moisture. But if plants are capable of possessing and exhibiting this preference in any degree, they must be capable also, in some degree, of the emotions of pain, and pleasure, and irritation, however limited, and which they probably possess to an extent correspondent with the limited amount of vitality, as compared with animal beings, with which they are endowed. The power of sensation is, surely, essential to the exercise of the power of choice, which latter power is extensively exercised by vegetables with regard to the various elements with which they come in contact, and from which they have to select, as regards the imbibing of nutriment from certain of them.

Some animals, as certain insects, for instance, have been thought to be endowed with a new order of sensation wholly different to any possessed by man, which they exercise through their antillæ. Probably, however, this is rather a modification or amalgamation of two or more senses, which are in these animals but very imperfectly developed, such as seeing, and feeling, and taste, than the existence of any new original sense. Indeed, the five several senses possessed by man, appear together to embrace and comprehend every ordinary quality in every material object in nature, so far as these are necessary to be communicated to our minds.¹ Whether therefore, in a future state, we shall be endowed with any senses actually new,

¹ *Mr. Isaac Taylor* remarks that the five senses may be regarded as limiting the percipient faculty, not merely as to the amount or extent of the impressions we receive, but in regard also to the kinds of sensation which the mind may be inherently capable of admitting.—*Physical Theory of Another Life*, c. iv.

and beyond those which we now possess, appears mainly to depend on the question whether the objects with which we shall have occasion to hold communication while in that state, will possess any qualities entirely new, and beyond those appertaining to terrestrial objects; and if so whether our senses as they now exist, or modified and altered as they must necessarily be by the change in our condition, will be capacitated to enable us to hold communication with such objects. On the other hand, it is possible that if those objects by which we shall be surrounded in another world, will not be found to possess certain of the qualities appertaining to terrestrial objects; we may not in a future state possess, as we shall not require, even certain of those senses with which we are in our present state endowed.

On the whole, as we do not find throughout the entire range of animated beings, however varying their pursuits or adaptations may be from our own, any senses actually new, and beyond those which we now have, or which are not compounded of them, although in some cases they are in their development and operation widely different from any that we possess; while some animals are not endowed with certain of the senses which we enjoy, one apparently wanting sight, another hearing, another smell, and others are also destitute of the powers of voice and of locomotion: we may, I think, reasonably conclude, that in our future state of being, when clothed with a spiritual or intellectual body, we shall possess no senses new or original beyond those with which we are now endowed; except so far as may be effected by new combinations, or by the extension and enlargement in various modes, of those already conferred upon us.²

Each of the senses, both in the case of man and in that of animals, and of vegetables also, so far as these may be supposed capable of sensation, are to a large extent dependent upon the texture and temperament, and more especially upon the organization, of the material frame in which they reside. To the material frame mainly, it is that the senses are serviceable to guard it against danger, and to give warning of the approach of evil from material objects. The senses, however, serve as lights also to the soul, to guide it in its course through the material world, and to supply it with a large portion of the intellectual nutriment on which it feeds. Each of the senses, moreover, are sources of emotion to the soul; and in the senses originate many of the feelings and affections by which it is excited, the nature of which will be considered in the succeeding chapters of the present book of this Treatise.

The senses differ, however, very extensively one from another

² *Vide ante, Prel. Diss., s. vii. a. 5, p. 144.*

as regards the influence which they respectively exercise over the mind, and emotions, and conduct; some of them being much more powerful in this respect than others. And here we may remark that all violent sensation, from whichever of the senses it springs, is in its nature painful as an emotion; and that moderate sensation only, can be pleasurable in its kind. So active are each of the senses, that they are hardly ever wholly at rest, even during sleep. The soul is then possibly more susceptible of sensation than when we are awake; and that of the body also, frequently continues. Such moreover is the constitution of our sensorial system, that many, if not all of our senses are capable of being in operation at once.

As regards the endowment with sensation of other beings besides man, we may infer that all beings possessing vitality, whatever be their essence, constitution, or organization, that have any communication or dealings with matter of any kind, are either directly endowed with sensation, or with such powers of perception and cognizance as enable them to perceive and have connexion with external objects in the way required. This we must suppose to be the case with the Deity Himself, who, although He may not actually possess particular organs of sensation, is able of His infinite power to see, and hear, and feel, and discern the essential qualities of all beings and objects at once at His will. Spiritual beings in general are probably endowed with spiritual organs through which they can perceive the qualities of matter, their real and essential, as well as those particular, qualities which are ascertained by us through the aid and operation of our material organs. Among animals, we may infer that all who are gifted with organization, are endowed with sensation according, and in proportion to, the sensorial organs with which each is supplied.

2. *The Sense of Seeing, its Nature and Operation.*

We now proceed to a precise and particular examination of these several senses in their order, considering them in regard to their essential nature and qualities, and the individual operation of each; after which I propose to take a comprehensive survey of their general characteristics and appliances.

The sense of seeing is excited by the entrance of the rays of light, either directly from the sun, or as reflected from some object in nature, into the organ of vision, called the eye; which delineates there, as in a mirror, the actual image of the object represented, and which is in a manner communicated to, or implanted by, that organ in the mind.

Our organ of vision, which is typical of, and perhaps may be

regarded as the shadow or material reflection of the soul,³ is one of the first formed in the embryo of all the organs, although it is that for which there can be the least possible use to the foetus. It may be, however, that, as the body becomes quickened by the soul, the representation of the soul itself is constituted and developed.

The eye appears, moreover, to be the organ of the body most intimately connected with our spiritual being. This sense is the most intellectual of them all, and by it the idea of any object is more directly and instantaneously conveyed to the mind, than by means of any other organ of the senses.⁴ But although the most intellectual of the senses, it is that which has the most to do with matter. This sense is also by far the most active, and the least liable to be fatigued; and it is the one through which the mind receives the largest amount of ideas. It is constantly exerted in connexion with each of the other senses, to aid the mind in discovering the nature of any subject, or object, of which sensations have been excited. The exercise of this sense is, in each case, purely voluntary. We can close the organ of sight at pleasure, and thus entirely prevent any sensations from being obtained through it. We are also able to direct it as we desire to the observance of different objects.

Sight appears, also, to be the sense which is the most capacious and extensive in its range, and which embraces the largest variety of objects, conveying notions of numerous qualities belonging to them, and in a mode the most correct; although, at the same time, it is the least immediately connected with the subjects by which it is excited, and is perhaps the least exact as regards the agreement of its sensations with the matter from which they spring. In exercising the senses of touching and tasting, the connexion is direct and immediate; and there must necessarily be some affinity with the objects of smell and hearing. But an object of vision may be at a very remote distance from us, quite beyond the possibility of any actual connexion with it; as in the case of the planets floating in ether, at spaces removed from our own frames almost beyond the power of human calculation. And if the organ of vision does not actually receive more sensations at a time than any other sense, it is able to transfer itself so rapidly from one object to another as to cause it to appear to possess this endowment. Indeed, one marked characteristic of the sense of seeing, is the extraordinary facility and rapidity with which its operations are effected, corresponding in this

³ *Vide ante, Prel. Diss.*, s. v. a. 4, p. 86.

⁴ *Plato* observes that "sight is the keenest of all the bodily senses, though wisdom is not seen by it."—*Phaedrus*, 65.

respect with the motion of the main element of vision, which is light, and with the motion of the soul, with which the eye of all the senses seems most immediately to communicate, and also to correspond.⁵ The mere fact of the exercise of seeing being so varied and so extensive, comprehending alike the perception of colours, of light and darkness, of distance, of shape, of size, and numerous other matters, might moreover almost induce us to contend that sight must be a complex, or rather compounded organ, and consist really of several separate senses, instead of one only. In this case, however, as well as in that of feeling and touching, it appears to be but one kind of power that is in all these instances exerted, however widely different are the various exercises which it can put forth.

Seeing is also, of all the senses, that which is the most independent of the others, although it resorts to them occasionally for aid, and for correcting its impressions ; as it is, in a corresponding manner, resorted to for this purpose by each of them in their turn when such is practicable, and circumstances so require. The eye is, moreover, of all the organs of sense, the most vivacious and agile,⁶ and seems in its actions most to resemble those of spiritual beings ; while the sensations obtained through this sense, appeal to the mind more directly and more constantly than do those of any other of the senses.

The sense of sight is not only the most spiritual and immaterial as regards the mode of its operation, of all the senses, but it is that sense the possession of which appears to afford a peculiar test of a certain degree of intelligence in the being endowed with it, whether of an intellectual or instinctive nature. Those animals only who are highly thus gifted, possess this sense. Those who are wanting in it, as also vegetables, are the most deficient in intelligence.

All the noblest beings, the Deity Himself, and the various superior intelligences, are endowed with the sense of seeing ; and there is no being of a high order, even in the animal world, that does not possess this sense, which serves indeed to constitute a clear and correct line of demarcation between the different orders of creatures of this nature.

Although animated beings only appear to be actually en-

⁵ *Origen* refers to the eye, both corporeal and internal.—*Works*, vol. i. p. 581.

And to the use both of the eyes of the body, and the eyes of the mind.—*Works*, vol. ii. p. 484.

⁶ *Dr. Carter Blake*, Lecturer on Comparative Anatomy and Zoology, Westminster Hospital, who has kindly rendered his valuable assistance to the author in perusing the proof-sheets of his work during its progress through the press, remarks on this passage :—"I think the ear might be preferred here, on account of the delicacy of the action on the fibres of corti."

dowed with the sense of sight, yet all organized beings seem to be affected by the action of light, which is the essential elementary medium of sight. Not only the lowest orders of animals who are wanting in the organ of vision, but, as already observed, certain vegetables also, are not merely excited by the presence of light, but are dependent upon it for their growth and health. In these the whole material frame appears to constitute an organ of vision of an inferior order, so far only as it capacitates them to imbibe the rays of light, although without reflecting the image of any material object; and the capacity to do which, might alone almost be contended to supply a distinct and independent branch or power of this sense.

Nevertheless, as the eye is the largest contributor to our stock of knowledge, so is it also the most prolific progenitor of error as regards the ideas which we thereby obtain. It is through the eye that all sensations and ideas of the shape and colour of objects are communicated; and it is the eye that falsely represents to us the visual reflections of those objects as their essential qualities, which constitutes the grand basis of error as regards matter in general.

3. *The Sense of Hearing, its Nature and Operation.*

The sense of Hearing is excited by the vibrations produced in the air by sound, which act upon, or cause motion in, certain acute and delicate organs constructed in the material frame, connected with the brain, that are expressly adapted to be affected by the slightest agitation of this kind. Sensations are from hence communicated to the mind, corresponding in their nature with those which stimulate the sense of seeing. The sense of hearing is of a very refined and exquisite nature, although not so much so as that of seeing, and serves in a very direct manner to convey sensations to the mind. The exercise of this sense may be said to be involuntary as regards its positive, and voluntary as regards its negative exertion. We hear without willing it; although, on the other hand, when we will, we can effectually prevent this sense from being exerted.

The sense of hearing is less frequently exerted than that of sight, although the former is very constantly in activity. The operation of the sensation of hearing is also far less rapid, and less facile than is that of sight, and the organ itself is less vivacious and sensitive.

Through the sense of hearing, we obtain very little actual acquaintance with the real nature of any object which so affects the senses, although of the sound caused by the motion of the

object, we have a distinct knowledge afforded; which is, however, almost the sum total of the information conveyed respecting such object.

The excitement of this sense, nevertheless, more directly and powerfully influences the soul, and less immediately acts upon the body, than does that of any other.⁷ Especially in the case of music, while the external material sense is but very little affected by it, the soul, and its feelings are much moved; and each vibration and note seems to penetrate into its entire being, and to agitate it and carry it along with it on the torrent which it creates. It would appear as though animated beings with organs far less vivacious, and active, and sensitive, than those requisite for seeing, are fully capacitated for hearing. Indeed, as this sense is excited by the vibration of the air, which is in its nature much more material and palpable than light; so many beings, incapable either of actual vision, or of affection by light, are at once affected by sound. This we see to be the case with worms, and even, to some extent, with plants. Possibly, however, as already remarked, the sensation of the vibration of the air, which occasions sound, is strictly and essentially rather that of feeling than of hearing.

The sense of hearing is, from its nature, the least liable of all the senses to be affected by the general affection of the body. It is the most isolated from the other sensorial organs; and, unless it receives some injury itself, is seldom disturbed. On the other hand, in certain cases the ear has been disordered when all the rest of the frame was free from malady. From the peculiar nature of this organ, it is that during sleep, and in several instances of apparent death, in fits of epilepsy and of somnambulism, this sense alone has remained active, when all the others have been suspended. During disease, or when the cold chill of death is creeping over the frame, the eyes soon become dimmed, and the nerves connected with them deadened and disordered;—the flesh waxes hard and cold, and loses its sensibility,—the tongue is dried up and parched,—and the nostrils become choked up, and lose their sense of smell, from want of respiration through them;—but the ears alone retain all their functions, in full, or in very great perfection. The air still continues to act on them. Of all the sensual

⁷ On the subject of the senses, *Aristotle* remarks that, of all the objects of our senses, sounds are the most striking resemblances of manners. The objects of touch, and of our taste, have no moral resemblance whatever. And even in the objects of our sight, shapes, and colours, the resemblance is faint and imperfect, because calm and motionless.—*Politics*, b. 5, c. 5.

Lord Bacon observes that the sense of seeing strikes the spirits more immediately than the other senses, and more immediately than smelling.—*Natural History*, cent. 2.

organs, the ear is perhaps that which possesses the least vitality, and which most resembles an inanimate structure. In its consistency hard and gristly, it is more like a shell than a living being. When the vital spark has fled, sounds will still continue to echo through its caverns, and the rolling gusts of air to mock in their wild notes the prostrate condition of the inanimate carcass to which this organ is allied.

4. *The Sense of Smelling, its Nature and Operation.*

The sense of smelling serves more extensively than any other, although by no means entirely, to acquaint us with the actual essence of substances of different kinds, while seeing and touching inform us only of their visible and tangible qualities. Hence it is that the sense of smelling is so constantly availed of, and is so valuable to animals; and hence also its extensive adaptation in medical and chemical science.

The exercise of the sense of smelling, like that of hearing, may be said to be involuntary as regards its positive, and voluntary as regards its negative exertion. It is excited by the reception of minute particles of matter which are emitted from various objects, and are received into the nostrils, or organs of this sense, and affect those organs by producing in them sensations corresponding with their own character and nature, which, in turn, correspond with that of the object from which they spring. Certain particles only, however, out of a great number, or of a certain class or kind, contribute to excite the sense of smelling, being such as are constituted of matter of an acute or pungent quality, and which serve to irritate or excite the nerves of that organ.

This sense appears in many respects as though it were not only excited essentially in the body instead of the soul, but as though its operations terminated absolutely in the former, and were not even necessarily or generally communicated to the soul. On a careful examination, it will however, I think, appear that, although originating in the body in common with every other physical sensation, its operations by no means terminate there. The soul is indeed excited by this sense as vehemently as by any other, and often far more so than by either sight or hearing; which is the real and true test of the connexion between a sensation and the soul.

It is directly, moreover, to the soul, or instinctive being, that this sense in an especial manner appeals in its most ordinary appliance, which is to serve as a guide in the choice of food, when the reason or instinctive discrimination is employed to determine upon the quality and fitness for this purpose of any subject which is present, and appears adapted for nutri-

ment, from the test afforded by the odour that it emits. Hence, if this sense, which seems at first sight to be the least connected with, or adapted to carry on communion with the soul, be shown to be so to the fullest extent, we may surely admit the connexion with this being of the other senses.

As hearing, of all the intellectual senses, seems to penetrate most deeply and most thoroughly into the whole soul, so the sense of smell appears to convey sensations communicated by it, together with the effluvia producing them, into the very interior and centre of the material system, which is the reason that it is so exciting; why bad smells are so repulsive and so resolutely avoided, and why those which are agreeable are so eagerly sought. In the case of touching and tasting, contact with the object is effected by the exercise of the sense, but certain non-essential properties of it only are tested by that medium. Smelling seems, nevertheless, to act, and to be resorted to, rather as an auxiliary to guide and correct the other senses, than as an independent sense of itself.*

This sense is exerted only occasionally, and but few out of the numerous material objects around us, have the effect of exciting it. Though very limited as regards its range, it brings the subject immediately into contact with itself as regards the actual particles or effluvial atoms thrown off by it, which are imbibed by the organ; by means of which an actual communication with our frames of certain of its properties and qualities, is established. Smelling, nevertheless, affords us a far less general and comprehensive acquaintance with the character of any object than does sight. It appears probable, however, that this sense is capable of receiving considerably more extensive cultivation, and more useful practical application, than it has hitherto obtained. Especially as regards the pursuit of pathology, it may be suggested that the condition of the patient would be often more speedily and more accurately ascertained by resort to smell than to sight, especially as regards the exhalations and ejections of different kinds from the frame, the diseased condition of which is peculiarly indicated by its effluvia. This is the course, moreover, to which the instincts of animals direct them, and with almost unerring success.

* "The sense of smell is of the highest importance to the greater number of mammals; to some, as the ruminants, in warning them of danger; to others, as the carnivoræ, in finding their prey; to others, as the wild boar, for both purposes combined" (*Darwin's Descent of Man*, vol. i. pp. 23, 24). But is not this sense of essential importance to animals generally, and to birds and insects quite as much as to mammals?

Dr. Carter Blake points out to me that "insects have a kind of smell, as shown by many beetles, which are violently susceptible to the action of camphor."

Man is greatly inferior to many animals, especially insects and carnivorous birds and quadrupeds, as regards the power of his sense of smell. In some creatures this sense is so acute and clear and distinct, that they at once perceive all the leading and active, if not the primary and essential, qualities of any object; and so far as its noxiousness or wholesomeness to them is concerned, which is, in fact, all that they have to do as regards its properties, they are enabled immediately to determine this point. Smelling, however, appears to be but very seldom offensive to an animal, however nauseous or foul the cause of it may be. Probably, the real fact and occasion of this is, that the offensiveness to any animal of the smell of a particular object, depends entirely on its deleteriousness to that particular animal. Most subjects which are foul and offensive to us—such as putrid flesh, excrement, and the like—are not actually noxious, and therefore there is nothing in them offensive to their senses, which are repelled by those exhalations only that are actually deleterious. On the other hand, if we place before them a strongly-scented substance, which, though not offensive to our sense of smelling, is in its nature poisonous—such as ardent spirits, narcotic drugs, and the like—we shall, at once, have decided proof afforded to us that the most vehement disgust is sometimes evinced by animals as regards the smell of certain objects. Man, however, in the case of smell, as in that of sensation arising from each of the other senses, is for the most part probably determined in his approval of each particular subject rather by custom and habit, and by association connected with such sensations, which are quite independent of the object of it, than by the precise nature of the sensation itself. Here, as in most other cases, the mind influences, if it does not wholly direct, both the choice and the course of action.

It may be doubted, perhaps, whether the highest order of beings—such as pure spirits—possess this sense, which is mainly, if not solely, necessary for enabling us to hold communion with matter, and for aiding in the application of it, in some way or other, to the purposes of the being excited by its sensation. It appears that, among animals generally, the sense of smell is that which is most prominent, most serviceable, and consequently the most influential; as it is this by which mainly they obtain that knowledge of external objects which is so important for them to possess. In man, as also in other intellectual beings, sight is probably that sense which they apply in all these cases, and which mainly avails them.

Some writers have nevertheless thought that the sense of smell is not possessed by either fishes, birds, or reptiles. That it is possessed by birds of prey, who seem to scent their food from a great distance, can hardly be doubted by any individuals who have had experience of their habits. And birds are

all perfectly endowed with nostrils, as well as complex olfactory apparatus, for smelling. Fishes appear to exercise this sense before tasting the bait, and to be allured by it to their prey; which is the case also with reptiles. And insects are doubtless drawn to their food by the same sense.

Although plants seem to possess capacities of excitement analogous to senses as regards the influence of light, and the effects of contact, and of heat, and cold, and motion, it may be doubted how far they are acted upon by smell. In order satisfactorily to test it in their case, we must determine whether the impurity of, or any infection of the atmosphere, which plants doubtless inhale, perceptibly or really in any way deteriorate them. It appears probable, however, that in this way they are affected indirectly and negatively only, and not at all directly or positively. They are injured by failing to procure a sufficiency of good and fresh atmosphere; but so long as they obtain that, it matters not to them with what odours the air may be tainted.

5. *The Sense of Tasting, its Nature and Operation.*

The sense of tasting is much akin to that of smelling, and is caused by the mode in which different particles of matter, according to their peculiar constitution or chemical properties, affect the palate or organ of taste on coming in contact with it; as a salt taste is produced by sharp and cutting particles which lacerate or irritate, and a sweet taste by round and smooth particles, which feel agreeable to the palate. Certain qualities only, however, out of a great number, contribute in each object to excite the organ of taste. Feeling and taste are considered to be very nearly allied. It will be found, however, if closely examined, that they are wholly and essentially distinct. But possibly, in each of the operations of taste, this sense is more or less aided by feeling or touching, which, it may be inferred, in nearly every case acts in conjunction with it. Sensations occasioned by taste are communicated directly to the mind. We are able to a certain extent to restrain the operation of this sense; although when we desire to be rid of any bad taste, we usually effect this by counteracting it through substituting some other substance of a more powerful flavour in the place of that from which the unpleasant sensation was derived. The exercise of this sense is absolutely voluntary, so far alone as regards our power to receive or refuse food.

The sense of taste is exerted but seldom in comparison with the other senses, and is excited only by objects which are brought into immediate contact with its organ the palate. It is not often, if ever, resorted to by itself alone and independently.

The sense of feeling is generally, if not always, and that of touching is in every case united or exercised contemporaneously with it, and must immediately precede, if it do not accompany, its exertion. That of smell does so very often, but by no means necessarily or uniformly.

Taste appears to be more variable by, and more under the influence of habit, than any of the other senses. Thus, many tastes originally and apparently naturally disagreeable to the palate, may by custom become agreeable; and those which we once deemed agreeable, become disagreeable. But this is not the case, or if it is, it exists to a very limited extent only, with sensations of sight or feeling; though in some degree it is with that of smelling, and in a lesser degree with that of hearing. Probably, indeed, taste varies with age, not only from the constitution undergoing a change, but also from the very organs themselves experiencing a considerable alteration. Thus, as regards the palate, the organs in manhood are more vigorous and active than during infancy; while in old age they become enfeebled, and require a strong stimulus to excite them.

It might hence, further be contended that the sense of taste is but a species or branch of that of touching or feeling, exercised in a peculiar way, and about particular objects only. It is excited solely by external objects, such as would occasion touching, and by actual contact with those objects. There is, moreover, a close alliance between the senses of taste and smell, as there is also, although not so intimate, between those of feeling and hearing.

The senses of tasting and smelling are not less useful than are those of a higher order, for the preservation of our material well-being, and our general guidance in life.⁹ The sense of taste, nevertheless, does not serve as a distinct and certain independent director in the choice of food, nor even in conjunction with smell, so far as regards the fact of a sensation being agreeable proving that the object of it is also wholesome; inasmuch as several substances which are very agreeable both to taste and smell, are, nevertheless, poisonous, if eaten. Many objects, moreover, which delight the smell, disgust the taste.

Although man appears to possess the senses of taste and of smell far less perfectly than many animals do, insufficiently so for his guidance perhaps; yet we should recollect that he has reason given him to assist him in operations connected with these senses; and that, by artificial means, he has to a great extent corrupted and blunted his senses. The gratification of the pleasurable excitement arising from the exercise of taste,

⁹ *Sir Walter Scott* remarks that "the taste and smell, like the touch, convey more direct intelligence than the eye and the ear, and are less likely than those senses to aid in misleading the imagination."—*Demonology and Witchcraft*, p. 45.

has, moreover, a very powerful influence. And it is this, in reality, which urges on men both to eat and to drink to a larger extent than what either their appetites demand, or their health requires; the former of which is very improperly termed greediness, although it is, in reality, totally different from it: greediness consisting in devouring a quantity of food beyond what is needed to satiate the appetite alone, without regard to the gratification of the palate. Both habits, indeed, lead to the same result, though they originate in two very different causes.

In some animals the senses of taste and smell are so acute, as to enable them to discern at once between noxious and wholesome food.¹ Certain persons, indeed, appear to suppose that the senses in man were sufficient for all these purposes, until he had perverted them. This, however, does not seem to me to be the case, as even if his senses had become blunted, they would not be so deadened by this means as almost to lose the faculty of discernment; and, indeed, by moderate exercise of different kinds, they might be expected rather to be sharpened and cultivated, than obliterated. Besides this, common domesticated animals, such as dogs, and horses, and cows, which to a great extent are fed upon artificial food, do not thereby entirely lose the faculty of judging by taste and smell, of wholesome or poisonous food. But even in man, his natural relish for any diet, may perhaps still be taken as a test of its salubrity. Thus, bread, and milk, and water are a species of diet of which we never grow weary, even by the most constant use; while rich and highly seasoned, and less wholesome food, soon cloy the palate, and will scarce bear a frequent repetition.

It has, however, been denied by some writers that animals of the lower order are endowed with the sense of taste. But what besides taste induces them to so decided a preference as they exhibit in the choice of food? This is especially the case with birds, who have been thought by certain naturalists to be almost, if not entirely, destitute of this sense. In their choice, however, they may be influenced by the exercise of the sense of smell, which is, perhaps, as nearly allied to taste, as touch is to feeling. Some persons, however, have denied them this latter sense also.

With the sense of taste, or with some capacity analogous to, and supplying, so far as is essential, the want of it, plants, as already pointed out,² appear to be endowed; whereby they are able to discern the quality of different substances from which they draw nutriment; and, by spreading forth their

¹ *Buffon* considered that in particular animals particular senses predominate, and that animals in general enjoy that of taste in a more exquisite degree than man does.—*Natural History*.

² *Vide ante*, s. i. p. 226.

fibres and branches in different directions, voluntarily to exercise a preference for some particular food over another. Indeed, the mode in which certain plants, by the radiation and extension of their roots, seek out, and prefer and select various nutritious elements, and reject others which are either noxious or innutritious ; might be adduced perhaps as an argument that they are not only endowed to a certain extent with a sense of taste, or, at any rate, with a sensorial endowment analogous to it, but also with one corresponding to the sense of feeling. In fact, it appears to be easier to prove that vegetables are endowed with the sense of taste, than that animals, even of the lowest kind, such as reptiles and insects, are destitute of it.

6. *The Sense of Feeling and Touching, its Nature and Operation.*

By the sense of feeling and touching, a direct sensitive communication is made to our material frames of the corporeal presence of certain material objects or subjects, by which those frames are affected. The four preceding senses might be denominated organical and local, inasmuch as they are, each and all, exercised through their appointed organs, and through them alone. The sense of feeling and touching is, however, exercised, by no distinct organ, but the entire bodily frame, including even the other organs of sensation, serves for this purpose ; and it may therefore be denominated inorganical and illocal. Nevertheless, although all parts of the body alike constitute an organ of both feeling and touching, yet different parts and members of it vary extensively as to their sensibility and susceptibility in this respect. Thus, with regard to heat, some portions of the body are much more affected by it than are others. Water that feels so hot to the feet or other parts of the body as to be scarcely endurable, does not painfully excite the hands, or appear to them to be of an extreme temperature. Consequently, we may infer that different members of the body actually differ as to the degree in which they are acted on by particular degrees of heat. And so may it be as regards other sensations arising from the exercise of the same sense,—with respect to cold, and density, and even motion.

The sense of feeling and touching must be deemed to be double, or complex, in its nature and mode of operation, comprehending both these sensations. The former part, or branch, of this sense is, moreover, divisible into several distinct kinds or powers, including the capacity of feeling from internal causes, such as pain arising from bodily disorder or disease, which is quite distinct from pain occasioned by touch ;

the capacity of feeling motion ; and the capacity of feeling the excess of heat or cold. The sense of touching is exercised only in perceiving the contact of our own frame with some external body.

The different modes in which the sense of feeling and touching is exerted, vary, moreover, both in themselves, and as organical operations ; and consist not merely, as in the case of seeing different objects, of so many distinct sensations arising from these several objects, although each of them are effected by the same identical organ of sensation.

Touching is, nevertheless, in fact and strictness, not a separate sense of itself, nor the same with that of feeling, but an independent branch of it ; possibly analogous to the power of perceiving light and darkness by or through the sense of sight, but which is very different from actual seeing. No doubt, indeed, all touching is feeling, but all feeling is not exerted or caused by touching.

The organs of touching and feeling are moreover quite distinct, and receive respectively different impressions as regards these sensations. Thus, the hand is much more susceptible than the foot as to touch ; but as to feeling, in the case of heat for instance, the foot is the most susceptible of the two.

The different capacities and operations of the sense of feeling and touching are, in reality, quite as independent as are the senses of feeling and tasting. The affinity, if not actual identity, of the senses of tasting and feeling, is evinced by the fact that it is difficult, and indeed, in some instances, impossible, to determine whether certain sensations are the operations of one or the other of these senses alone, or of both of them conjoined. An instance of this occurs when mustard or pepper is taken into the mouth. The sharp pungent sensation excited by either of these substances, belongs as much to the sense of feeling or touching as to that of taste, and to that of taste as much as to that of feeling or touching. Here, moreover, the sensation of feeling and that of touch appear to be distinctly and independently excited. Touch is excited immediately that the mustard comes in contact with any part of the mouth, and feeling is excited directly that the pungent particles of the mustard affect the nerves.

There is this further essential difference between feeling and touching, that while the former is an involuntary, the latter is a voluntary operation ; and that while the former is a passive, the latter is an active operation. The proper and strictly correct course appears therefore to be, not to consider these as two distinct and independent senses, but to regard the whole as a double sense, consisting of, and under the name of feeling and touching.

On the whole, the main distinction between touching and

feeling may be concluded to be this, which is indeed a very material one. Touching is an external, while feeling is an internal organ. Touch can only be exerted with regard to external objects. Feeling may be exerted with regard to objects which are either external or internal, and also with regard to certain other subjects as well, such as motion, which we feel, but cannot be said to touch. So also with respect to heat and cold, which we do not experience through the sense of touching; nor do we perceive through the touch, the sensation of internal pain.

Feeling and touching constitute therefore, strictly, rather a double sense than two distinct senses, including both the two sensations in one. While feeling is mainly internal, touching is entirely external. The former is caused alike by motion of the frame, coldness or heat of the atmosphere, internal disarrangement of our organic system, and many other circumstances quite independent of the contact of foreign bodies with our own. Touching, on the other hand, is produced by the contact of some object with our material frame, by which various sensations are occasioned, such as those of heat and cold, roughness and smoothness, hardness and softness, and several others; each of which constitutes not merely a different, but a different kind of sensation. Moreover, many sensations which belong to feeling, do not belong to touching, and many belonging to touching do not belong to feeling, although some few are common to both; and all of each kind are alike occasioned by the excitement of the nerves of the bodily frame.

Feeling is, perhaps, next to seeing, the most frequently exercised of all the senses in conjunction with the others; as we very seldom observe an object, or hear a sound, without the sense of feeling being more or less excited, although, in many cases, this is so gently done as scarcely to be perceptible. Thus, a strong light, or a glaring colour, by affecting the nerves of the eye, excites the sense of feeling, as well as that of seeing. In the exercise of the senses of hearing, tasting, and smelling, feeling is also generally excited. But while the sensation of feeling is constant and ceaseless, that of touch is irregular, and only occasional, and indeed but seldom. The sense of feeling and touching is, indeed, during sleep, so far dormant, as that no ordinary and slight impressions are received by it. If the body is then affected by coming in contact with external objects, by internal sensations, or by motion of the frame, any of these operations fail to affect it unless they are sufficiently powerful either to drive away sleep, or to awake the senses themselves, and thus to give a turn to the current of the thoughts which are passing through the mind while dreaming.

The two sensations of feeling and touching, although always distinct and different, are, nevertheless, sometimes difficult to distinguish. Touching is, also, so far, an independent sense, in that it is that in which man is said to excel all other living beings; whereas many of them may be as sensitive to feeling as is man, or even more so. However, the superiority of man in susceptibility as to touch, is matter only of conjecture. Of all the various sensations, that of touch appears to be the most certain and unerring, and it is in many cases appealed to as the guide and director, and indeed the corrector of the others.³ Nevertheless, even this sense is sometimes deceived.

The sense of feeling and touching is, probably, the earliest developed of them all, possibly, to some extent, even before our birth, and when we are but in the condition of a fœtus. From the cries and contortions of infants, it would also appear to be very acute contemporaneously with our coming into the world.

The exercise of this sense in a negative point, is, in every respect, altogether involuntary, as we are not only unable to prevent it from being exerted, but even to restrain its action. The utmost that we can effect here, is to divert the attention of the mind from the sensation; or to counterbalance the sensation itself by the excitement of some other. In a positive point, its exercise is voluntary or involuntary according to circumstances. It embraces also as great a variety of sensations as does the sight, although these are comprehended within a narrower scope or range. This variety in its sensations is mainly owing to the wide distribution, causing in effect thereby an actual multiplication, of the organs, or inlets, of this sense, which are dispersed about, and extend to all the regions of the material frame. Every nerve in the frame constitutes in fact the organ of a separate sensation. Feeling is, indeed, of all sensations at once the most active, the most vigorous, the most stimulating, the most influential, and that over which we possess the least control. Both feeling and touch, however, vary in their acuteness according to the particular part of the body in which they are excited.

Feeling is, of all the senses, the most indestructible; and although different parts of the body may become insensible to feeling, yet this sense is probably never wholly extinguished while life remains, inasmuch as every separate member and organ of the body is, in reality, a separate organ of feeling. Nor can any portion of the body be rendered insensible to feeling with-

³ It was observed by *Sir Walter Scott*, that "the sense of touch seems less liable to perversion than either that of sight or smell, nor are there many cases in which it can become accessory to such false intelligence, as the eye and ear, collecting their objects from a greater distance, and by less accurate inquiry, are but too ready to convey."—*Demonology and Witchcraft*, p. 44.

out being essentially injured, and its vitality being affected. All the other senses, however, are liable to be entirely obliterated; and this may happen without material injury, either to them, or to the body, as a whole. Feeling is, perhaps, the only sense which man not only never loses, but which no living creature does not, to a greater or less degree, possess.

According, probably, to the proportionate perfection of the organic system, feeling varies much in different animals as to its facility in excitement, and the amount of intensity to which it is experienced. The lower animals, such as the polypus and the worm, which are wholly destitute of, or possess but very imperfectly the higher senses, are endowed with that of touching in an exquisite degree of excellence. It may be doubted however whether they have that of feeling to any great extent; and, possibly, that of touching is the only sensitive power with which they are gifted.

Both feeling and touching seem, however, to a certain extent to be common to plants as well as animals, and may, in some respects, be as fully exercised by the former. The sensitive plant possesses the sense of touching, apparently, as acutely, and as perfectly as does an animal. And if one plant is capable of this endowment, surely others may be so also; although not displaying the power so openly. All plants, indeed, exhibit, more or less, the possession both of feeling and touching by the influence upon them of laceration, and light, and heat, and cold.

Aristotle holds that the possession of the sense of touching, is the discriminating test by which is determined the distinction between plants and animals. Plants may not be endowed to the same extent with touch as animals are; but if they are entirely destitute of it, in what manner can we account for the preference shown by many plants for certain substances, to which they cling, while they avoid others? This is seen in the case of climbing plants, which stretch out their tendrils and their branches towards particular trees suitable for them; while they shun those not adapted for the purpose. The fibres of the roots of most plants will, moreover, seek some objects and avoid others. There is indeed, stronger evidence that plants are endowed with instinct, than that they are destitute of sensation.

Although all the organs of sensation, besides possessing their own particular and appropriate sensitive endowments, are also gifted with that of feeling as well; yet the sensation of feeling is, nevertheless, entirely distinct from and independent of, the emotions of pain and pleasure, and does not necessarily produce either of these emotions, as the emotion springing from it may be one of entire indifference, and productive of neither of them. At the same time, this sensation does in a

great many cases form the original foundation or medium, both of corporeal pleasure and of corporeal pain. It is not, however, itself the emotion ; which is quite different to, and independent of the sensation.

There are certain other sensations which are occasionally excited in our material frames, and in certain organs of them, that might, in some respects, claim to constitute of themselves distinct senses, but which are ordinarily classed and comprehended under the sense of feeling and touching. Such are the sensations of hunger and thirst, and of gratification arising from the appeasement of those sensations ; of pain from wounds and sores (which has no connexion with touch), and the sensation excited by the exercise of sexual intercourse, which latter feeling has, by some philosophers been classed as a sixth sense.⁴ So also with regard to sensations of heat and cold, arising from the state of the atmosphere, or the condition of our own bodies, which have no connexion with touch.

On the other hand, a grave question may be raised, whether the sense of feeling is not one which is rather a sensation that is appurtenant to, and part of, each of the other senses, than a strictly independent one by itself. A sixth sense, however, ought not to consist of a power to receive a sensation, allied to, or a branch of, one of the other senses, as in the case referred to ; but it ought to be constituted by the capacity to receive a sensation of an order entirely distinct from, and independent of, any of the other senses ; and to be something quite new, original, and unconnected with them.

On the whole, more especially as complexity is thereby avoided, I have deemed it best not to disturb an arrangement with regard to the classification of the senses, which has the sanction of high authority, and almost universal custom, for its support.

All beings, which are endowed with material organized frames, are capable of the sensations of touch and feeling ; but it may reasonably be doubted whether beings whose essence is purely and absolutely immaterial, if any such exist, can be so excited.

7. *Distinctive Application, and Classification of, and Mutual Co-operation between, the Several Senses.*

The individual characteristic peculiarity of the senses as regards their powers of operation, may be defined to be as

⁴ According to *Burton*, *Scaliger* added a sixth sense, which he termed titillation ; and *Lullius* considered speech as a sixth external sense.—*Anatomy of Melancholy*, pt. i. s. i. p. 22.

follows. The sense of sight acquaints us with the form, size, motion, and colour, of an object. The sense of hearing with its action on the air. Touching with its external, or surface qualities. Smell and taste with certain of its properties which are internal and essential. Feeling however affects us independently of all external objects and their qualities. Seeing and hearing are the means of occasioning more pleasure than pain. Feeling and smelling excite more pain than pleasure. Tasting probably produces about an equal measure of both. Touching, by itself, independent of feeling, is the cause of neither pain nor pleasure.

As regards the distribution of the senses in nature, it may be observed that of all the senses, feeling is the most generally possessed by organized beings. Touching is common to most, but not to all creatures. Taste, of the various senses, appears to be the least generally possessed. Seeing and hearing are common to some beings only, and in several animals are more acute than they are in man. Smell is probably common to certain animals only.⁵

Although the operation of each sense is confined within the strictest limits as regards its application to the peculiar objects, and for obtaining the peculiar sensations, for which it is exclusively adapted; yet, like the several members of a well-regulated community, each sense is at all times ready to the utmost extent of its power, to aid the operations of the others, and to assist the mind in obtaining correct and complete information on the subject of its inquiries, through sensations derived from objects in the material world. Thus, although the eye, like every other sense, is limited to the boundaries of its own sphere, so that this organ can see only, and by sight form a notion of the shape of any particular object; yet the sense of feeling and touching may also be resorted to to aid or confirm its researches. By the organ of seeing alone, we perceive the qualities of light and shade, colour, and magnitude in any object, as also its distance from us, and its motion. By hearing alone, we become acquainted with the sounds which it emits. By smelling alone, we discern certain of its material qualities dispersed by effluvia. By tasting alone, we obtain a closer acquaintance with these qualities. By feeling and touching, are discerned the texture and temperature of material objects, as also their size and shape, to some extent; and thereby we ascertain whether they are in motion or at rest. The organ of

⁵ *Burton* remarks that the senses of hearing, sight, and smell, are of commodity; those of touch and taste, of necessity.—*Anatomy of Melancholy*, pt. i. s. i. p. 22.

According to *Buffon*, the sense which has the strongest affinity to thought, is the touch. That which has the strongest affinity to instinct and appetite, is that of smelling—a sense in which man must acknowledge an infinite inferiority.—*Natural History. The Senses.*

sight has principally regard to its main medium, which is light ; that of hearing to its medium the air ; that of smelling and tasting to the particles emitted from the objects to which the sense is applied ; that of feeling and touching to the external substance of the matter by which our frames are affected.

Each of the senses, therefore, aids the other, by conveying to the mind information of the qualities of certain objects which that other sense failed to supply. Thus, sight affording no ideas as to the texture of any subject, this is supplied by the touch. Touch affording no ideas as to its colour, sight is resorted to for this purpose. Taste and smell communicating no information as to the shape or texture of an object, sight and feeling are called upon to supply the deficiency. In many cases, moreover, one sense is serviceable in correcting the decision of another ; or, to speak more accurately, in assisting the mind to arrive at a proper determination from the different sensations communicated. Thus, sight directs hearing in deciding on the distance of objects. In some animals, feeling is supposed to supply the place of hearing ; as in the case of worms, who are affected by the vibration of the air.

One of the most remarkable circumstances connected with the senses, is the fact that although they, occasionally, several of them have to do with the same subject, no confusion in the least degree ever exists as to which particular sense is in such an instance exerted. Food in the mouth is both touched and tasted ; but even here we have seldom any doubt where touching ends, and where taste begins. Moreover, although all the senses, more or less, assist each other in their several operations, no one sense can perform the functions of, or, in its individual operation, except possibly in very rare instances, be mistaken for the act of another. In sensation by feeling and touching, taste, and smell, we are brought into immediate contact with the object of such sensation. In that by hearing, the atmosphere forms the medium of communication, the object of which may be distant, as may, in some cases, happen also in sensation by smelling. In that by sight, where there is no immediate contact, but light forms the medium of intercourse, the distance may be much greater still.

Whenever the senses of feeling and touching, taste, or smell, are affected, it generally, though not invariably or necessarily, happens that some emotion either of pain or pleasure accompanies the sensation. But in the case of the excitement of the senses of seeing and hearing, the sensation is ordinarily experienced without any emotion accompanying it ; although, in many instances, their affection may be so accompanied. This appears to be owing to the more intimate connexion of the three former senses with the material frame, and the feelings which spring from it, than is the case with the two latter senses, which

address themselves more directly to the soul or instinctive being.

A correct classification of the different senses, according to the nature of the several sensations which they serve to supply, is a task of great difficulty. The senses of seeing, hearing, smelling, and tasting, having each peculiar and exclusive organs to themselves for their own particular exercise, might be termed the organic senses. The sense of feeling and touching has, as already remarked, no particular separate or exclusive organ, but appears to be distributed all over, and throughout the material frame, and exists or is excited in each of the other sensorial organs, and ever accompanies their exercise.

Although the senses themselves are but five, yet each of the sensations belonging to each sense, admits of a separate classification; and perhaps for each class of sensations, a distinct nerve or order of nerves may exist. Thus, the sensations of sight are distributable into those of light, colour, distance, size, and shape. Those of hearing into sensations of loudness, softness, shrillness, and the like. And so with respect to all the other sensations of each sense.

Every sense appears, moreover, to be both very comprehensive and very complex in its nature, and adapted for several distinct classes of sensations, and indeed for all of that particular order. Thus, by feeling and touching we ascertain not only hardness and dryness, but also heat and cold in bodies. Sight may point out not merely distance, but size and colour. Sound may distinguish the quality, as well as the extent of vibrations. It is possible, indeed, that animals, or certain other beings, are endowed with one single capacity only, out of several which each of the senses possesses, as that of distinguishing merely hardness in bodies by the touch, that of discerning between light and darkness, without distinction of colour, by the eye. Nor is it improbable that some insects have only one or two senses each of this kind, from whence it has been inferred that they have senses new and different to ours, and that therefore there must be an existent order of senses beyond those with which we are gifted. Probably, however, these supposed new senses are, in reality, merely the imperfect and single portions or fragments of what we possess the perfect and complex constitution.

Our inability to discern spirits, and certain other beings, by the eye, as also bodies in motion of great swiftness, and objects of extreme minuteness, and to hear certain sounds, not now audible, arises, not from anything in those spirits, or sounds, or objects, but from the inadaptation of our senses to apply themselves to them. Possibly, as science progresses, instruments may in time be invented which will so extend the powers of the different senses, as that they will be enabled to

grasp many subjects which are now beyond their sphere ; corresponding with the manner in which the telescope and the microscope have extended and enlarged our vision, and the electric telegraph our means of communication.

Certain of the sensorial organs of the material frame which appear to be double, or even twofold, are not so in reality, but are only of two parts or halves, forming together but one complete whole, as in the case of the two lids of an oyster-shell. Thus, the eyes and the ears, although ostensibly each distinct organs, supply in reality but the single organ of seeing ; and the one eye and ear corrects the impressions of the other. In the case of wings, it is evident, that the two constitute but one organ, that of flying, and neither can act without the other. This is to a large extent the case also with the legs ; and even as regards the hands, the same may be said with respect to most of their operations. In the case of the sense of smell, the organ itself is single, but with a double instrument or recipient engine. In the case of feeling and touching, both the organs and the sensations are multifarious, and perhaps unlimited. The organ of taste alone is entirely single. Possibly in regard to the faculties of the soul, in an analogous manner as respects certain powers, such as those of comparison and imagination, where a double action is contemporaneously carried on in dealing with two or more ideas, a corresponding complexity in their constitution may ultimately be revealed.

It might, perhaps be urged in favour of our possessing new senses in a future and higher state of existence of our material frames,⁶ that as we may reasonably suppose that the grosser senses of tasting and smelling will not be required in that state, so they will not then be existent ; and that it may therefore be inferred that some new senses will be given to us in their stead, as, if it were not so, we should be less perfectly endowed in that higher condition than we are in our present state. To this I would however reply that it appears to me most likely, that although we shall lose, because we shall not then require these lower senses, yet those of a higher order will be so expanded and improved as to answer every sensorial purpose required in that condition. Feeling, for instance, will probably embrace many phases of sensation in infinite perfection, such as those of ascertaining precisely the extent and quality of motion, of texture, and of temperature, which we now class together under the general denomination of feeling.

The most important classification of the different senses is, however, that which regards their various and relative adaptation

⁶ *Locke* appears to be of opinion that as our present senses comprehend all the qualities in bodies, so no new ones are likely to be added. — *Essay on the Understanding*, b. ii. c. ii. s. 3.

for aiding the mind in its different pursuits, or assisting mainly as respects our mere physical wants; from which consideration the senses themselves may be divided into those which are intellectual, and those which are merely physical. The senses of seeing and hearing must, as already remarked, be deemed to be those which are of an intellectual nature, or such as especially adapt for the pursuit of intellectual occupations. Those of smelling, tasting, and feeling and touching, are of an entirely physical nature, or such as peculiarly fit us for animal, or rather medial pursuits. These latter senses belong, moreover, exclusively to the medial part of our constitution, and are enjoyed by many animals, according to their particular construction or exigencies, in a much greater degree of perfection than man is found to be endowed with them. The sense of smelling is possessed in considerable acuteness by birds of prey, which are by no means remarkable for instinctive power; and this sense, which is the most purely physical, and the least extensively possessed by man, exists in great perfection among insects, the lowest class of created beings. The senses of seeing and hearing are not, however, enjoyed largely by intelligent beings only, as some animals possess these senses in much greater excellence than man does. And although the intellectual senses are observed in so very high a degree of perfection in certain species of animals, yet they serve but to guide them in their instinctive pursuits, and, in common with the physical senses, mainly direct them in obtaining food.

For the cultivation and extension of the powers of the intellectual senses, different arts have been invented, such as those of painting, and music, and the other fine arts, of which these senses form the foundation. These intellectual senses require more the aid both of the intellectual faculties and of artificial cultivation, than do the other senses, which are mainly assisted by the medial endowments and powers.

It is further to be observed that the higher and more intellectual any particular senses are, the more independent is the soul of the body as regards the perception of sensations by it; and the lower are the senses, the more dependent is the soul on the body for receiving its sensations. Thus, seeing and hearing are experienced by the soul during its various cogitations, and during dreaming especially, almost as forcibly as through the material senses; while feeling and touching, and still more tasting and smelling, are hardly ever exerted except when the senses are excited by them.

The mind possesses an entire, absolute, and complete control as regards the exercise or non-exercise of certain of its senses; although as regards the exercise of other senses, its influence is very small. In each case, however, it can only originally apply a particular sense to the particular

purpose for which it is by nature adapted; although, as already observed, senses widely varying in their nature one from another, may essentially aid each other in respect to the special end sought to be attained. The control which man possesses over his sight, appears to be very extensive, and almost absolute so far as concerns the choice to exert it or not; but beyond this, he has but little control or power as to the mode in which he will employ his organ of vision, except as to the selection of certain of the objects on which it shall be engaged. As regards hearing, too, man has the option of preventing to a great extent, though not wholly, the action of this sense; although he cannot control or direct its operation when it is in exercise, even to the limit of choosing objects for such exercise. Over the sense of smell, he has the same absolute negative power as over the sight, and he can select subjects for the exercise of the organ of this sense. As regards the sense of taste, he has but little, although he has some negative power to avoid sensations from this organ, while he may select subjects for its exercise at pleasure. With respect to the sense of feeling and touching, we have less control, either negative or positive, over the exercise of this sense, than we have over any other; and although we may avoid many painful sensations, and promote the excitement of many that are pleasurable, yet as regards the vast majority of these sensations, we can neither prevent their occurrence, nor mitigate their force. The principal reason, indeed, why our authority over this latter sense is so very limited, is that the whole material frame constitutes an agent for its excitement, while in the case of each of the other senses, they are exercised through a distinct organ, which can be closed or not at our will.

As each of the senses perceives, according to the nature and adaptation of such sense, not the essential qualities of any object, but its obvious, and outward, and operative qualities only, being those alone out of several which at once strike the sense, and present themselves to our notice; and as all the other and more essential qualities lie dormant, although certain, if not all of them may be discoverable by investigation adapted for the purpose; so the mind aids the senses in acquiring knowledge, quite as much as the senses aid the mind.

How serviceable the senses are to regulate and render correct the action of the mind, independent of the knowledge which they communicate to it, and to direct its efforts by informing it concerning the objects and operations around it; is fully evinced by the wandering of the mind, and the irregularity of its course of action and cogitation that take place during sleep, which commence at once when the influence upon it of the senses is withdrawn, through their being lulled into inaction.

Indeed, even in insanity, the irregularity of the mental operations is mainly owing to the mind being deprived of the proper influence of the senses, whereby it, as it were, loses its balance.⁷ It is, indeed, fortunately ordered for us, that the important internal operations of our material system do not, like those of our spiritual being, at all depend upon our own will; or the same irregular movements and impulses might direct, and interfere with, their various functions, corresponding with the disturbing influences exercised over the operations of the mind.

The possession to a large extent, and in a great degree of perfection, of those of the senses which appear to be of a lower, and more entirely physical order, is probably to be regarded as a test of the predominance in the system of the medial endowments, over those which are intellectual and moral. Those animals which exhibit the least intelligence, are, ordinarily, the most highly gifted with the lower, or physical senses; which are those of taste, feeling and touching, and smell. The sense of touching in the oyster, and the snail, and the earthworm, and the polypi, is so very acute, as alone to suffice to warn them of approaching danger. And the less civilized mankind are, the more acute are the senses of this class. Animals in general are, however, more peculiarly liable than is man to be deceived by their senses, more especially by the impulses obtained through one sense only, inasmuch as they have not the aid of reason, as man has, to correct erroneous impressions. In their case, however, as in that of man, we may infer that the different senses aid and co-operate with each other.

8. *Their Variety in Different Persons as to Acuteness and Vigour.*

Sensation probably varies as much as to its quality in different modes,—its acuteness, its intensity, its celerity, its extent,—as do any of the intellectual powers; and is, we may infer, dependent upon a great variety of circumstances, both as regards the material organization, and the mode in which the impressions on the senses are conveyed to the mind. Moreover, if different parts and organs of the same body vary considerably as to their acuteness and sensitiveness to pain; and if different persons vary greatly, one from another, in these respects; it may be conclusively contended that the frames of different animals, which in their texture, temperament, and general constitution vary so much, must extensively and correspondingly vary also in this power. Both different men and different animals indeed differ much one from another,

⁷ *Vide ante, Prel. Diss.* s. viii. a. 4, p. 158.

alike as to their sensitiveness to feel pain, the acuteness with which they feel it, and their power over their emotions to subdue, and restrain, and disregard its attacks.

Different persons will also be found to vary very widely and very essentially one from another as regards their sensorial power, more especially with respect to the acuteness and vigour which characterize each of their senses.⁸ Indeed, the senses all of them vary in different individuals, and in every conceivable mode; which is but one out of the many causes that contribute to produce variety in these individuals themselves. It is also to be observed that animals of different species vary greatly one from another in this respect; and probably in many cases it is this variation which constitutes the primary and most essential distinction between them. Animals of the same species also differ much from one another here.

The senses indeed vary widely in acuteness, readiness, and general power, not merely among different animals endowed with them, but among those of the same species in the case of mankind, and even in the same person at different times. Not only is this occasioned by the particular formation of the organ in the individual, but by any special peculiarity also in texture, and temperament; by the state of his health, and by the period of his age. We see this especially in the senses of seeing and hearing; but it is, more or less, perceptible, in each of the other senses.

In all these cases, however, both as regards man and animals, we may infer with tolerable, if not with absolute certainty, that this variety in their sensorial system consists, essentially and solely, in the comparative adaptation and power of each sense as regards the acuteness and vigour with which it receives sensations; and that there is no actual difference as to the mode in which each sense acts, or as to the impressions which it conveys from particular objects: all eyes and all ears serving alone for seeing and for hearing; and all white bodies, and shrill sounds producing sensations of whiteness and shrillness, in whatever eye, or whatever ear, their sensations are excited. In the senses of tasting and smelling, men also differ, more

⁸ *Malebranche* holds it to be an error to suppose that all men have the same sensations of the same objects; and he contends that this difference is the original cause of the strange variety which is found in the inclinations and tastes of different persons, "according to that almost infinite diversity which is to be found in the fibres of the auditory nerve, in the blood, and in the animal spirits."—*Search after Truth*, b. i. c. xiii. s. 5.

Buffon asserts that "the difference between our senses is occasioned by the more or less exterior position of the nerves, and of their greater or smaller quality in the different organs."—*Natural History. The Senses.*

Dr. Carter Blake tells me that he "dissents from this opinion of *Buffon*. 1. Because the nerves of sight and hearing are deep seated. 2. Because all nerve-structure is of the same quality so far as we know."

especially as to their acuteness and vigour; as also in that of feeling and touching.

Difference in sex causes a difference in sensation, so far as the material organs are concerned, and in the emotions and other feelings springing or derived from sensation, corresponding with, and to the extent that this difference in sex occasions a difference in acuteness and refinement of perception, quickness, and other modes of operation; a difference, however, not so great as that existing at various periods in the same person, produced by alterations as regards age, health, and the influences of temperature, and many other material external causes.

Not only, moreover, do different persons differ one from another as regards the qualities and powers of their senses, but the same person, at different periods, and under different circumstances, greatly varies here. A change in the density of the atmosphere, or as to its temperature, the influences of disease, or the operation of the emotions, appetites, or passions, may all conduce to promote this result. And although it cannot be doubted that all persons alike, and the same persons at all times, receive the same identical impressions from certain sensations, whether of sight or sound, of smell or taste, or of feeling and touching, all persons, at all times, perceiving coal to be black, and sugar to be sweet; yet, according to the particular condition of the body, and even of the mind as well, these different sensations affect us very differently, and result in consequences corresponding with their influence.

It will generally, however, be found that the senses of animals, especially those of seeing, and hearing, and smelling, are more acute, and more vigorous, than are those of man. This, although, in part owing to their individual essential constitution, in the manner hereafter pointed out, arises in a great degree from the fact that the sensations of animals are more uniform and more correct in their operation than are those of man, the result of their being uninterrupted by the influence of the intellectual faculties, which in man draws off much of his attention from what is going on around him, to what is in process in his own mind. He is attracted from what is passing without, to what is passing within. While animal sensation and attention are engrossed entirely by things external, the cogitations of man are mainly occupied by things internal. While animals enjoy the world for their wide range, man's busiest and widest world is his own soul. And as different men approach to or recede from in different degrees animal nature, as regards the proportionate mental cultivation which they receive; so do they also, correspondingly, in different degrees, resemble animals, as regards the acuteness and vigour of their sensorial system.

The primary, and indeed essential causes of difference in the

operation of the senses among different persons, appear however, to be the variety in texture and temperament of their material organs; and the variety also of the vital fluids by which the material frame in all its operations, is much affected and influenced. The former of these causes is, probably, at once the most important and essential, as it is also the most apparent, so as to be open, in many cases, to ordinary observation. The relative acuteness and vigour of different senses are, more especially, immediately affected here. And as different parts of the frame differ so much as regards their intensity and vivacity in sensation; so it is probable that the bodies of different creatures differ, in a corresponding degree in this respect, according to the nature of their organization, and the texture and temperament of their material frames.

The condition of the nervous ether or fluid, and of the organs of that fluid, has, moreover, probably extensive influence upon the senses generally, especially those of sight, hearing, and feeling and touching; and as regards alike their acuteness, celerity, and activity. According to this sensorial variety in different men, as we observe more clearly in the case of animals, are their actions of each kind swayed and directed in several different ways, as will be pointed out in the following chapters of the present book of this Treatise.

Both in man and animals, each of the senses varies very considerably, not only according to the condition of the material frame as regards its health and vigour; but with the growth of that frame a corresponding change takes place at each stage in the condition of the sensorial system which is implanted in it. Not merely in acuteness and vigour, but in vivacity and in facility of receiving impressions, the senses are to a large extent regulated by the state of the body. Accordingly, the different senses become developed correspondingly with their dependence on the material frame, and on its own development. Of the several senses, that of feeling and touching, is probably first exerted, as the whole frame constitutes its organ, and commences its sensorial operation as soon as its other functions begin. Taste appears next to be developed, as one of the most necessary for the guidance and sustenance of the individual. Hearing, which has a separate organ of it sown, is subsequently brought into play. Smelling is, probably, not fully developed until after those already mentioned, inasmuch as it depends mainly on the growth of its material organ. This is also the case as regards sight, which is frequently not imparted until many days after the birth of the animal, although the organ of sight is one of the first that is formed.⁹ In most cases, this sense is very feeble at

⁹ According to *Buffon*, in man the sense of vision is developed at birth, in animals that of appetite.—*Natural History. The Senses.*

first. Indeed, it may be inferred that all the senses during early infancy are but numbed and blunt. As the frame advances towards perfection, the senses also arrive at their full vigour. The maturity of the body, which it attains during middle age, is that when the senses are most active and acute, and enjoy the highest perfection. With the decline of the body, when old age and decrepitude oppress it, the senses themselves each become less acute, and active, and vigorous, and some of them occasionally are entirely obscured. With respect, however, to the action of the soul as connected with sensation in the manner already alluded to, and so far as sensation resides in that being alone, it is as acute, and as vigorous in all respects in old age as during maturity; inasmuch as with the decline and decay of the material frame and its organs, the spiritual being loses none of its energy. Different souls, however, like different organic frames, differ much from one another as regards their own sensitive power, and that in a corresponding variety of modes.¹

Civilization and domestication, both in man and animals, in certain respects blunt the senses; and perhaps it is a wise provision in the social economy of our world, that they do so. In civilized life it would on many accounts be productive of constant inconvenience, and would occasion frequent nausea, if the organ of smelling were so acute as to detect every impurity, or every offensive ingredient, in the various artificial compounds of food which we imbibe. Probably too, the touch, and the sight, if correspondingly acute, would in the same condition be the cause of corresponding uneasiness. Nor is it unreasonable or uncharitable to suppose that the moral as well as the material sense is also to a considerable extent blunted by civilization; and indeed, if it were rendered more susceptible than it is at present, the conscience would be constantly rebelling at many acts that take place in society, and which, in a state of nature, and comparative seclusion, when it could calmly survey them, it would condemn.

Civilization does not, nevertheless, necessarily, and as a matter of course, paralyze the senses; but their being either deadened or quickened by civilization, depends entirely on whether by this means they obtain greater or less cultivation; and according as this is the case with either of them, is that particular sense weakened or improved. Thus, the sense of smell is debilitated by civilization, because there is then but little occasion to cultivate it extensively; while in a barbarous condition it is carefully availed of to warn us against deleterious food which is novel to us. Taste, on the other hand, which is more cultivated in a civilized than in a rude state, owing to the

¹ *Vide ante, Prel. Diss. s. v. a. 3, p. 80.*

great variety and complexity of viands and cordials in the former condition, is improved rather than injured by civilization. The senses of sight and hearing are, in certain respects, cultivated more, and in others less, in a condition of civilization than in a barbarous state. Probably, on the whole, the real truth of the matter is this. Acuteness in sensation generally, but more especially in sight and hearing, is most stimulated and promoted in a state of barbarism; but versatility and refinement are chiefly cultivated in one of civilization. In a state of nature or of barbarism, the senses generally are ordinarily more acute than in one of civilization, because the body is then, in most cases, more healthy, and is less subject to disease, which is frequently caused by artificial habits and indulgences; and the mind is free from those cares and anxieties which mental cultivation and civilized intercourse are calculated to entail, and which conduce to blunt the senses. Some particular senses, however, in certain particular modes, are more completely developed by civilization, than they can be in a state of nature.²

9. *Defects and Disease in the Sensorial System, and its Improvement by Cultivation.*

Valuable however, and indeed indispensable to us, as are each of the senses, more especially as regards our communication with the external material world, and true as they ordinarily are to their appointed trust; they will, nevertheless, like the most faithful of servants, sometimes fail us, and even deceive us and lead us astray.³ The most common sensorial error is that when sensations from particular objects are conveyed imperfectly, rather than incorrectly; the impressions in such cases being not actually wrong, but partial and incomplete. This happens when a distant object of magnitude appears to the eye to be a small one which is near, or a round

² *Professor de Quatrefages* remarks that, "the senses of savages, more exercised than ours, extend further. They can distinguish smells as we distinguish colours."—*Report on the Progress of Anthropology*, p. 291.

³ *Lord Bacon* remarks that "there are two faults of the senses—they either desert or deceive us. For, in the first place, there are many things which escape the senses, however well directed and unimpeded, owing either to the subtilty of the whole body, or the minuteness of its parts, or the distance of place, or the slowness or velocity of motion, or the familiarity of the object, or to other causes. Nor are the apprehensions of the senses very firm when they grasp the subject; for the testimony and information of the senses bears always a relation to man, and not to the universe, and it is altogether a great mistake to assert that our senses are the measure of things."—*Novum Organum*.

Malebranche asserts that we have no sensation of external things which does not include some false judgment or other.—*Search after Truth*, b. i. c. xiv. s. 1.

ball seems to be a flat circular plane. In these cases nothing essentially at variance with fact is communicated, except that by the omission of certain sensations out of the sum total, we are led astray. It is only when the senses are affected by disease, or by organic injury, that they mislead us, as regards any positive knowledge they profess to convey. But this is owing to their whole functions and economy being in such a case disturbed and perverted, so that the ordinary application of them can no longer be resorted to. Thus, a person whose eye is pierced or struck, appears to see flashes of light, when in reality all is darkness around him. Such accidents as these will however never occur when the senses are sound, and their operation is regular. Disease of the senses, and of the sensorial system, can, moreover, be produced only by disease or injury of the bodily frame; and no mere affection of the mind, however forcible, can of itself and immediately affect the senses. Nevertheless, when by disease, any of the senses are injured or perverted, the whole system of mental operation appears to be thrown into disorder; and erroneous sensations being communicated, all subsequent deductions from these false premises are proportionably and correspondingly erroneous. Thus, mental delusions themselves frequently arise from the sight or hearing being affected, or from the organs of those senses being acted upon in an irregular manner. Too great susceptibility of sensation, which is in itself a serious and leading defect, and indeed almost amounts to disease of the sensorial system, is also calculated to be attended with disastrous consequences, and to be the source of extensive and multifarious errors; as is also the opposite defect or disease, that of want of sensibility or susceptibility in the senses, or their organs.⁴

The primary and producing cause of disease in the sensorial system, whichever organ is affected, being unquestionably disease in the material frame, if, indeed the latter does not, in most cases, occasion the former, or is not rather identical with it; it necessarily follows that the general condition of the bodily system in each individual, as to health, and vigour and soundness, and especially of his sensorial organs, must have an important influence, as regards the power and correctness with which his senses are exercised, and convey

⁴ According to *Lord Bacon*, by far the greatest impediment and aberration of the human understanding proceeds from the dulness, incompetency, and errors of the senses: since, whatever strikes the senses preponderates over everything, however superior, which does not immediately strike them. Hence, contemplation mostly ceases with sight; and a very scanty, or perhaps no regard, is paid to invisible objects. The entire operation, therefore, of spirits enclosed in tangible bodies is concealed, and escapes us.—*Norum Organum*.

their appropriate impressions. In some of these cases, however, the disease is that of the particular organ of sensation, in others that of the whole material frame.

Diseases of the senses, especially of those of sight and hearing, are much more frequent among men than among animals; although there does not appear to be any essential difference in the structure of their organs of sensation, to account for this difference in susceptibility to disease. It probably arises, mainly, from two causes; first, the general liability of man to disease beyond what is the case with animals, owing principally to the wear and tear of his material frame through the action upon it of the intellectual functions. Secondly, the greater wear and tear to which the senses, especially those of seeing and hearing, are liable, beyond what is the case in animals, from the demand which our intellectual avocations make upon them.⁵

Not only mental delusion and error, but insanity itself, is the result of disease of the senses, one leading feature of which is the difficulty experienced by those afflicted with it, of directing the attention of the senses to any object, and of receiving correct and natural impressions from them.⁶ The remedy for diseases of this kind, when they are material or organic, belongs rather to medicine than to metaphysics, and with such a subject we have therefore nothing to do in the present Treatise. So far, however, as the mind, and the medial system, are capable even in these cases of obtaining a remedy by means of proper discipline and cultivation, and of being thereby, to some extent, fortified against calamities of this kind, the inquiry falls, legitimately, within our province. In conjunction with this subject, we may also inquire whether, and how far, the senses themselves, either through their individual organs, or otherwise, are some one or more, or all of them, capable of cultivation.

From an investigation of this topic, it would appear as though the higher the state of civilization in which any particular person moves, the more extensive is the cultivation of his intellectual, and the more limited the cultivation of his mere animal or physical senses. But in a state of barbarism, his lower senses are more cultivated, as they are also of more constant, more immediate, and more practical use to him than those which are higher. The latter senses seem, however, under ordinary circumstances to be the most active and energetic. Savages,—whose intellectual powers for want of cultivation are very limited, but whose instinctive capacities are very great, in

⁵ The accuracy of this statement is considered doubtful by *Dr. Richardson*, and the passage is only retained in order to obtain the benefit of the experience of some of those persons whose especial attention has been devoted to the subject.

⁶ *Vide ante, Prel. Diss. s. viii. a. 4, p. 160.*

some respects, indeed, nearly approaching to those of the higher order of animals, — have their lower senses very acute, far beyond what they are found to exist among civilized races, and to a degree rivalling the most sagacious animals. Sight and hearing are also often observed to be extensively developed in these people. In each case the vigour and correctness of the sense, to whatever class it belongs, is in exact proportion to the exercise and cultivation allowed to, and bestowed upon it. From the pursuits and habits of these persons, particular senses will thus obtain a very extensive degree of development. Each of the senses, indeed, appears alike capable of cultivation, and of improvement thereby. In blind and deaf people, the remaining senses are generally remarkably acute, which is only to be accounted for by the amount of exercise that they receive. In some animals, certain of the senses exist naturally in extraordinary perfection; and those particular senses which appear to form the foundation for their peculiar individual instinctive powers, are possessed by these animals much more extensively in general than by man. Animals, however, have their senses naturally fully developed, and are incapable of enlarging them by cultivation. At any rate, Nature herself, in the exercise which she affords to these senses, supplies all the cultivation that they require.⁷ Nevertheless, both as regards their senses and their instinctive endowments, animals are liable to become greatly deteriorated by the neglect to exercise them with due vigour and activity; as we see in the case of domesticated animals, when contrasted with those of the same species in a wild state. Possibly, therefore, as regards their sensorial system at least, animals differ from man, not so much as regards the general effect of cultivation, as in the kind of cultivation which is required. Civilization is that which is most efficient for that purpose in man. A state of nature is that which is most efficient for animals. For these conditions they are respectively best adapted, and are respectively fitted to attain in them the highest perfection of which their nature is capable.

Although the intellectual senses are those only which are extensively cultivated by man when in a highly civilized state of society, yet all the senses are probably equally capable of receiving their appropriate cultivation. Indeed, we have proof in the case of savages already alluded to, that the grosser senses are as improvable by this means, as are those which are higher. The eye and the ear are the most obviously susceptible of education, because these being the intellectual senses, are cultivated

⁷ *Dr. Richardson*, however, regards this assertion as too dogmatic. The passage has, nevertheless, been retained on account of its reference to what is elsewhere advanced in this work on the same point.

in the employment of the intellect, which is the portion of our being to which education is specially applied. Probably, however, each of the senses, so far as they are themselves concerned, are equally improvable by cultivation. Indeed, the experiments which have been made as to this matter, so far as they have proceeded in tasting and smelling, and in feeling and touching also, attest the correctness of this supposition.

A great and essential difference exists, nevertheless, between the exercise and the cultivation of a sense. Taste and smell are cultivated in a barbarous, but they are exercised only in a civilized state of society. In a state of nature, men carefully exert these senses, minutely examine the reports that they make, and decide from these reports as to the particular substances of which they will avail for alimentary and other purposes. When they are in a condition of civilization, they rarely cultivate, but merely exercise them, and seek to derive gratification from such exercise. The only persons, indeed, who in such a state may strictly be said to cultivate them, are those whose line of business requires them to be minutely acquainted with the qualities of certain substances as regards their taste and smell, such as confectioners, wine merchants, and perfumers; and these individuals, by cultivation of particular senses, bring them to a high degree of acuteness and even perfection.

As regards the general cultivation of the senses, the real and true principle appears, on the whole, to be this. The intellectual senses of seeing and hearing are most exercised in a state of nature, but are most completely cultivated in a state of civilization. The animal senses, those of feeling, tasting, and smelling, are most exercised in a state of civilization, but receive the fullest cultivation in a condition of barbarism.

It may be doubted how far, in the actual cultivation of each of the senses, the mind itself is employed, or is resorted to, independent of the senses, to aid in the operation they are endeavouring to effect, or to assist in; whether, in fact, it is the mind or the senses, to which cultivation is actually applied. On the whole, it appears to me that it is the senses which are so benefited, and that their improvement by cultivation, great, and almost unlimited as that occasionally is, is wholly confined to themselves; and is external or material, and entirely independent of the mind, and of the internal or spiritual senses, as also of any aid or direction which the sensorial operations may receive from the soul. In many of our mental operations, however, where a corporeal organ is resorted to, it occasionally appears difficult to determine whether the mind or the material organ is that which is mainly employed.⁸ By cultivation of the senses, it is the acuteness and the susceptibility of the organ to perceive,

⁸ *Vide post*, b. iii. c. vi. s. 2.

not the power of the soul to receive impressions from the sense, which is enlarged. It is, in fact, altogether an animal or material improvement that takes place; and through which we obtain a considerable share of that power or capacity with which animals are so extensively endowed, particularly in those sensations, such as feeling and touching, and smell and taste, which peculiarly appertain to the animal part of our nature. Thus also the hand by cultivation acquires dexterity, quite independent of the improved skill of the mind to direct it; which, in its turn, may be in many cases also improved, both in its actual power, and in its ability to receive impulses from the senses.

10. *Mental Processes attendant upon Sensation.*

We have, in the last place, to inquire into the nature and order of the operations which take place in the mind, consequent upon the impression of sensations on the sensorial organs, and the application of the ideas derived therefrom to various intellectual efforts.

It must here be premised that certain sensible qualities cognizable by our senses, are annexed to all substances, so that these qualities are both perceived by us, and we also perceive that they are annexed to the objects from which they spring. Beyond the impression made on our sensorial organs by these qualities, we have no information whatever as to the nature of these substances.

There may be numerous other substances (as must be the case with spirits), to which no such perceptible qualities are annexed, and we can never, therefore, know anything of them through the senses. And those substances concerning which we possess the fullest information, possess, doubtless, many other qualities, of which we are wholly ignorant, solely because such qualities are not perceived by the senses. The qualities in any object of which the mind takes cognizance, are, moreover, in many cases, not the most important or essential, but are merely those which are best adapted to impress the senses. Thus, hardness, shape, and gravity, in the ideas of a stone, and heat, colour, and light, in the ideas of fire, serve to convey but very imperfect notions of the actual nature and essential property of these beings. Very frequently, however, several senses are exercised together in obtaining knowledge of one object; as in the case of fire, the senses of seeing and of feeling may be both exerted at once.

Each sensation when conveyed to the mind, serves but to produce only its corresponding idea, which is, in fact, but a perception by the soul, as the sensation itself is by the body. When, however, ideas are received into the mind, they are at

once compounded and united with other ideas. Men differ from one another, probably, much more as to the latter process, than they do as regards the former. Nevertheless, neither sensations nor ideas uniformly serve to convey correct and adequate notions of the objects from which they spring. Indeed, so contrary in many cases is the nature of the sensation itself, and consequently of its product, the idea, to that of the subject from which it emanated; that it might be almost said of the senses, what a satirist said of words, which are the audible or visible types of ideas, that their object is not to communicate, but to conceal or confuse knowledge.

In man, however, the senses are all of them more or less assisted by the mind. Thus, in the case of sensations whether of sight or sound, we interpret by the reason the meaning of an object imperfectly seen, or of a sound imperfectly heard. Animals, being unable to do little, if anything, more than simply receive the sensations which they imbibe, are easily deceived by sights or sounds resembling those to which they have been accustomed. Indeed, unassisted by the reason, the senses would often deceive us. With regard to distance, and the shape and size of many objects, our impressions are frequently incorrect, or rather, when not aided by the mind, are seldom just. In fact, a large portion of our errors have their foundation in sensorial delusion. Hence it is alone by experience, that we are enabled to judge correctly even with regard to the commonest sensations of external objects. Thus, we naturally see all objects inverted, and each object appears to be double, and to be close to the eye; but, by experience, we are led to regard them as they really exist. Certain sounds, too, such as the vibration of the notes of a bell, which the senses represent to us as one note, reason teaches us to consist in a succession of notes. Mistakes of this kind, as regards our sensorial impressions, being early rectified by custom, we come at length to consider the sensations, not as we have actually received them, but as we have been taught to interpret them.

Hence, in these common cases, the impressions of objects which the mind receives, are very far from being essentially true and correct, and as they really are. But this is from no defect or disease of the senses, or their organs, of the nature already considered. Nor does it detract anything from the practical value of the senses, although as regards their scientific application and end, it may be deemed to be a fault. Their object is, however, to serve us for the former, and not for the latter. If adapted efficiently for the latter, they would be too refined and fragile, and also too much perplexed by counteracting sensations, to serve well for the former. Thus also is it with animals, whose senses are, however, more perfect, because less blunted than ours by artificial appliances.

Sensations may, moreover, be correct and perfect as sensations, acting properly according to the constitution of the particular sense itself; but may be very incorrect and imperfect as regards their adaptation to convey precise information respecting the real qualities in the objects which excite them. Thus, sensations of colour, or of shadows, may be very correct as such, but very incorrect if regarded as conveying accurate ideas of the forms of the bodies which they represent. Each sense moreover appears to be perfect in itself with respect to the particular class of sensations that it is adapted and intended to convey; but it is imperfect so far as it is incapable of conveying any of the actual, and essential qualities of any one class of any particular subject. Indeed, few if any sensations afford us real and genuine knowledge as to the actual nature of the object from which they spring, but only as to some of its secondary qualities, which may, however, be the least important; and, as already observed, only a few out of a great number of qualities are thus represented, by which a wholly inadequate, and very often an entirely erroneous notion of its precise nature is communicated. In addition to this, it will be found that, in many cases, not the qualities of any kind, but merely the practical effects caused by the subjects, are what excite the sensations of them, so that very little indeed of their real nature is thereby communicated.

The sensations of the qualities of different objects when received by the senses, are transmitted to the mind in a manner corresponding with that in which these sensations are transmitted from the objects themselves to the senses. This transmission of the sensation from the organ of sense to the mind, is what generates an idea; or, rather, the sensation itself becomes changed into an idea, directly that it is perceived by the mind.⁹ Both sensations and ideas are, indeed, alike conveyed to the soul. But while the one is a mere affection of it, the other is an actual perception by it.

All sensations of external, terrestrial, material subjects are received by, and conveyed to, the mind through the senses. But it does not follow from hence that ideas which are not of this nature, should be so produced. On the other hand, it is rather to be inferred that they could not be thus originated or obtained. Ideas, for instance, which are conveyed to the soul by the Holy Spirit, or by the direct communication with it of any other soul, if this be in any case permitted, would not be received through the senses, but injected, as it were, immediately into the soul.¹ Ideas which are generated in the mind by its imaginative or reasoning process, may be also said

⁹ *Vide post*, b. iii. c. ii. ss. 1, 2.

¹ *Vide ante*, *Prel. Diss.* s. vi. a. 4, p. 116.

to be received into it by a different channel than through the senses. Many ideas are, moreover, obtained by the mind during sleep, when the senses are shut. Not improbably, this is especially the period for spiritual communication with the soul.² Some philosophers have, however, proceeded so far in attributing every idea to the aid of the senses, that they conclude that when impressions are received during dreaming, or in a vision, even then the optic nerve must be acted upon. But surely it is more natural and more reasonable to conclude that the soul itself receives the impression in these cases directly, without any intervention of the senses, or their nerves.

During the exercise of memory and imagination, the soul, independent of the material senses, really sees the object as distinctly as though the eyes were fixed upon it. And so also with regard to sounds, and even to a certain extent as respects the sensations of feeling and touching, and of taste, and smell, which, being less intellectual in their nature, are more absolutely dependent upon the bodily senses for their vivacity. When we are in the dark, so that material objects cannot attract the eye, mental vision is exercised to the full, and the impressions upon it are very forcible. But more especially is this the case during sleep, when the action of the organ of vision is not only suspended, as it is during darkness, but the operations of all the senses are for a time benumbed. It is then that the soul, being deprived of corporeal sensation, herself sees, and hears, and feels, and evinces how entirely independent she really is of these material aids. If, on the other hand, the material senses alone saw and heard, we should never have any ideas of sight or sound presented to the mind, except when these senses are acted upon by external causes.

As the body has during sleep no external wants to be supplied, those particular organs of sense which serve in general for this purpose, are then inactive and torpid; but as danger is then necessary to be guarded against, the organs of hearing, and of feeling and touching, which principally protect us against aggression, retain their power of being acted on, although in a state of temporary inactivity while the body is in this condition. This inactivity of the senses is, however, so essential a part of sleep, that keeping the senses in exertion is the surest method of keeping any one awake.

The value of our senses as inlets of knowledge, is perhaps best evinced by considering how destitute we are of information on those subjects where our senses from their nature and constitution are unable to serve us. Thus, as regards spirits, and our own souls, which are the really essential part of our being, we are wholly ignorant of their nature, because entirely

² *Vide ante, Prel. Diss. s. vi. a. 4, p. 116.*

unable to apprehend them by the senses. In a future state, we may expect to know spirit as perfectly as we now do matter, probably far more so.³ Nevertheless, during such a state, even while the soul is separate from the body, it is quite possible that we may still receive impressions from, and obtain knowledge through the senses, so far as the mind is affected by them; for although the material organs of them may no longer exist, yet the spiritual senses, as regards the impressions which the soul is capable of receiving,—which would then be communicated directly, instead of through the intervention of material organs, and would therefore be more forcible,—will still remain as vigorous, and as perfect as ever. We know, or are persuaded of, the existence of our souls rather through the reason than the senses; as we are also persuaded through the reason, or arrive at the conclusion after due inquiry, that there must be, and is, something more than the material bodily senses by which we receive sensations and obtain ideas; and that there must be some intelligent principle with which the senses communicate internally, correspondingly as they do externally, with the objects from which the sensations arise. When, however, a sensation merely is excited in any of the senses, the soul is at once, and in the first instance, affected only or moved by the event. But when this sensation is actually perceived by the mind, an idea is forthwith produced, or, as it were, kindled, by the communication. Thus, in reading or repeating, so long as we do it, as occasionally happens, without thinking about it, or by rote, as it is called, the material frame and its organs alone are exercised, and act upon the soul. But immediately that we bestow attention upon our proceeding, then the mind it is which is perceptibly, voluntarily, and intelligently, engaged upon the subject.

Man, from his earliest infancy, is induced to exert his senses, and to exercise his faculties, especially those which aid him in the acquisition of knowledge, on account of the direct and immediate gratification which such pursuits afford. Inactivity at this period is, moreover, distasteful, and even distressing, to him. How opposite is this to the feeling of old age, when this activity is no longer requisite or desirable. Probably, in the first stages of life, when the future infant is but a foetus, no faculties of the mind are exerted; but at this time the sense of feeling supplies their place, and serves as our only guide. Certain it is that at this early period, and at the birth of the infant, the instinctive power which is dependent upon sensation, is most strong, and, in the absence of reason, it is the main protector and director of the infant.

Two, or more, indeed, of the senses may be excited

³ *Vide ante, Prol. Diss. s. vi. a. 5, p. 112.*

simultaneously, and either by the same or different objects. But the mind can devote its attention to only one sensation at a time, and, consequently, an idea from one sensation only can be obtained at once; although the mind can transfer itself from one subject to another, with the greatest rapidity and celerity.

The several organs of the senses, having each of them communication with the brain, all the impressions or sensations which they receive are immediately transmitted to it, and forthwith to that portion of it which is the region of the soul, or instinctive being. These sensations are thereupon conveyed to the mind, and are noticed by it; and when attentively viewed and examined by it, from them are derived what are termed ideas,⁴ which are to the mind, what sensations are to these material organs

The soul is, moreover, intimately connected with the different active organs of the body, and operates directly upon them, and through them; while it is also immediately connected with, and acted upon, through the sensorial organs. The main difference with regard to these operations consists in this, that while, in the case of the active material organs, the soul acts on them, and from itself, towards the external world; in the case of the sensorial organs, the soul is acted upon by them, and towards itself, from the external world.

All the notions or ideas relating to terrestrial matters of a single or simple kind, that are existent in the mind of any individual, were originally, therefore, transmitted there by means of sensations, from which our simplest and original ideas are first derived. Such are those by which we are informed of the mere existence of things around us. We have no conception or ideas of external objects, except what we obtain in this manner. Thus, a man born blind, has no conception or ideas of colour, or of the nature of forms around him. A man born deaf, has no conception or ideas of sound. Nor would a person who had passed all his life in a dungeon, have any notion (except by communications from other persons) of the world from which he was secluded. Hence also, there may be many natural objects of which we have as yet no conception, because no ideas of them have been communicated to our minds.

Whether, before the union of the soul with the body, it existed in a separate state, and was imbued with knowledge of any kind, which it brings with it on entering into its present condition, as some philosophers have imagined; or whether the soul is created anew when united to the body; are questions which it is utterly beyond our power, in this life, satisfactorily to solve.

⁴ *Vide post*, b. iii. c. ii. s. 1, 2.

CHAPTER II.

EMOTION.

1. *Origin and Nature of the Emotions.*

In the present chapter, we shall proceed to the consideration of those various agitations, or excitements of different kinds, whether existing in the soul or in the body, and however arising, which are termed the emotions; and to point out their origin and nature.¹

From sensation to emotion, the transition is indeed easy and natural. Hence, we are led to the second progressive step which ordinarily, if not always, occurs in the action both of the body and of the mind; emotions being the first fruits, as it were, of sensation, as regards their effect in setting in operation the whole machinery of man.

As regards the present subject, it is to be observed that involuntary excitements of several sorts are constantly arising both in the mind and in the body, not only in consequence of the affection of them by the entrance into the mind of new ideas, and the action on the senses of outward objects of different kinds; but also from the ordinary operations and actions of the soul, and from the various and constant changes in the material frame, so that neither the mind nor the body are ever suffered to exist for long in an entirely quiescent state. Nor are they, indeed, capable of continuing for more than a very brief period, in the same condition or temper.

Several of these feelings of opposite kinds and in different degrees, may be, and generally are, excited together at the same instant; although that particular one which is most forcible, is that alone which for the time engrosses to itself the sole attention of the mind.

This excitement or variety, when not too vehement or too constant, is not only natural but agreeable to the mind, as we may perceive by the effects produced from the progress of these sensations being retarded, and but slowly recurring, when what is commonly termed dulness takes place; by which we mean

¹ What *Plato* termed the passions, defining them to be "the motions of the soul, excited by some good or evil," I have here denominated emotions.

that but few ideas of an exciting nature, so as to produce in our minds these feelings, enter into it. It is this kind of excitement which in reality and essentially renders the society and conversation of others so agreeable. The loss of society we may indeed partially remedy by being engaged in some occupation which will have the effect of supplying various ideas, and producing these sensations within us. Persons differ indeed in this respect, according to their individual and particular medial, moral, and mental constitution, some desiring more excitement than others. Hence, may we attribute the origin of the principle of novelty, one of the most important and powerful in the human mind, and which has a great influence both on the actions in general, and also on the mental operations.

Novelty is indeed occasioned, not merely by a succession of ideas passing through the mind, but by a succession of different ideas, each one varying from the other ; inasmuch as the same, or very similar ideas repeated, do not produce this result. There is a feeling in the body very much resembling and analogous to this mental feeling, which leads it to derive gratification from frequent change of posture, and occasions a painful sensation to arise from a long continuance in the same position. When, therefore, by any sensation, or idea, or operation of the mind, either the mind or the body are in any way moved, or excited, or affected, an emotion is produced.

Emotions, which are so termed because they are the first movements, or causes of movement, in the course of exertion, are excited not only by events which are present, but also by the recollection of those that are past. The affection of the different senses is, however, the most direct manner in which the simple emotions are produced, and which are called forth without any exercise of the reason with regard to them. Nevertheless, whenever we receive pleasure through either the eye or the ear, it is not these senses themselves that are agreeably excited, but the sensations received through them act upon the emotions, and cause them to be so affected. Thus, a beautiful object, or a beautiful sound, pleases not the eye or the ear, but the soul itself, which is gratified by the excitement through the sense of corresponding emotions. To the senses themselves, the objects are neither pleasing nor displeasing, but are all alike indifferent. Thence, as a large proportion of the pleasure which we experience in this life, although originating in the exercise of the senses, or the gratification of the appetites, is felt and exists, essentially in and by the emotions of the soul ; so in a future state may the same pleasure be occasioned by the excitement of these emotions, although this excitement originated not in the material senses or the appetites, but in the soul.

One of the most remarkable circumstances connected both with the senses and the emotions springing from them, is the fact that the very same object of an emotion, which, if it excites us through one sense appears congenial and pleasurable, if it excites us through another sense, it becomes uncongenial and disagreeable. Thus, both the sight and the smell of the rose, and of the violet, are agreeable to most persons; while the taste of these flowers, which is but another mode of imbibing or perceiving the qualities that they possess, is disagreeable. So also the taste of the potato and of the cabbage, is agreeable, while the sight or smell is unpleasant. Hence, we may infer that the decision as to the pleasantness or painfulness of the emotions received through the body, rests entirely with the body, and not with the soul; and depends on their congeniality with the different organs of the body with which they are brought into contact. For, if the mind determined this result, all sensations from objects of the same quality, must produce the same effect. But if, on the other hand, this is determined by the organs of the body, the sensations would naturally vary with the different character of the organs.

An emotion I would therefore define to be a condition of excitement, either gentle or vehement as the case may be, ordinarily urging us to action of some kind or other, and immediately proceeding from, or produced by an impulse, which may be either internal or external as regards the cause of it; and which may originate, as it occasionally does, either in the soul itself, or, as is at other times the case, in the material frame, from whence it is communicated to the soul. In the excitement of an emotion, although there is always a definite cause by which it is produced, there is not, necessarily by any means, apparent or existent, a specific object,—as we shall hereafter see to be the case with regard to the appetites, passions and affection,—towards which it is directed.

As it is with the senses, so is it with regard to the emotions, that we are capable of experiencing their excitement in a moderate and limited degree only. Intense pain, intense pleasure, or intense irritation, would at once, as it were, destroy the equilibrium of our constitution, and they are consequently beyond our endurance.

As Socrates declared with regard to the soul, that tranquillity was the only legitimate good; so with regard to the body it may be said that insensibility is its most perfect condition. For, as the excitement of emotion seems to give warning of some disorder in the frame; so the absence of emotion, in which this insensibility mainly consists, amounts to an assurance, tacit though it be, of the absence of any such ill.

Sensitiveness, in which excessive liability to emotion mainly and essentially consists, depends in part on the keen suscep-

tibility of the soul to receive impressions directly, and in part on the keen susceptibility of the mind to receive impulses from the operations of the senses. In some cases one, and in some cases the other of these conditions, is the cause of sensitiveness. When the two are combined, it exists to the greatest extent.

2. *Their Distinctive Variety, Constitution, and Classification.*

Before we descend to a particular examination of these various emotions individually, it appears desirable to consider the several classes and orders under which they are included, or into which they diverge; by which, indeed, the main and essential differences between them of each kind, are at once exhibited.

And first, as regards the origin of these emotions, which is of two kinds:—1. Material emotions, or those originating in the impulses of, or springing from the body, are commonly excited through those senses which I have considered to be of a physical nature. 2. Mental emotions, or those originating in impulses of the mind, when they are derived from sensations, are commonly excited through those senses which are more especially of an intellectual nature.

Secondly, as regards the constitution of the emotions, they may also be distinguished into two kinds:—1. Those which are single or simple, and pure and uncompounded, existing as perfect, distinct, and independent feelings in themselves; and which are produced in a direct manner in the mind, either by any particular sensation excited in it, or from some feeling in the material frame: and, 2. Those which are double, complex, or compounded.

The complex emotions are of two kinds: those which are compounded, or made up of the simple emotions alone; and those which consist of one or more of the simple emotions, and are also aided by the operation of any of the mental faculties.

Although every person alike is liable to be excited by precisely the same emotions, and the same causes in each person produce the same or closely corresponding emotions; yet different persons vary much from each other as regards the relative vigour and acuteness of their emotions, and also as regards the influence which they exercise over them. In addition to this, it will be found that the same person is very differently affected, and very differently influenced at different times by the same emotions. The same subjects and objects, moreover, produce different and even opposite emotions in different persons, nay even in the same person at different times; which is not because different persons, or the same persons at different times, vary as regards their sensations or perceptions of the same subject or object, but because they are variously affected by different feel-

ings or emotions associated with these sensations. In each person, the quality and power of his mind, the texture and temperament of his material frame, the character of his sensitive system, his moral disposition, the circumstances in which he is placed, age, sex, education, clime, and temperature, make a vast difference here, both as regards the force of these emotions, and the influence they are calculated to produce.

The circumstance of our being so constantly distinctly conscious of mental as well as material emotions of great variety, almost seems of itself to afford a conclusive proof both of the existence, and of the independence of the soul. We frequently experience pain in the body, which does not affect the mind; and at other times we are conscious of a physical emotion of this nature, which is extended also to the mind. Sometimes the soul alone is affected, which affection is, however, occasionally extended to the body.²

But it may be said that animals as well as man are conscious of, or liable to be excited not only by material emotions, but by those which are independent of the body; and therefore that if mental emotions, as distinct from those which are material, be allowed to serve as evidence of the existence of a soul, animals also must be endowed with such a being? That animals are excited by sensations independent of their bodily frames, and even of the feelings which arise in them, cannot be doubted; and that animals do possess an independent, intelligent; or spiritual instinctive being, corresponding with the rational soul in man, such as was contended for in the Preliminary Dissertation to this Treatise,³ a strong proof is afforded by the fact just cited. It is not, however, necessary that they should possess rational souls, more especially as, on the one hand, their emotions are very different from those of man; and as, on the other hand, the being which we suppose them to possess, is exclusively adapted for emotions of the character which they exhibit.

3. *The Simple Emotions, Pain and Grief, Pleasure and Joy, Irritation, Surprise.*

We will now proceed to the examination of those emotions which are simple in their nature, directly springing out of sensations alone; after which, when we have surveyed the general order of these excitements, we shall consider them as

² This statement is questioned by *Dr. Richardson*, while metaphysicians of high authority appear to render it their support. Perhaps the individual experience of each person may afford him the most satisfactory means of satisfying his own mind on the point.

³ *Vide ante, Prel. Diss. s. x. a. 3, 4.*

united or blended together, and inquire into the constitution of those which are complex or compounded.

The simple emotions are four in number, pain and its counterpart grief, irritation, pleasure and its counterpart joy, and surprise.

The first of them is directly repulsive, the second and fourth are simply motive, and the third is directly attractive. The emotions are thus in a manner analogous to the principles of repulsion, disturbance, and attraction, in the material world.

The emotions of pain and pleasure may be classed under those which are original, and those which are derivative. The original emotions are those which are directly produced by the excitement of the sense of feeling, either in a painful or a pleasing manner. The derivative emotions are those which arise from, or are produced by, the excitement of some other of the senses besides that of feeling, but which tend ultimately to call forth either pain or pleasure, independent of the latter sense.

Man, however, as already remarked, appears capable of experiencing, and of enduring emotions, only up to a certain fixed, moderate, medial extent; so that neither pain, irritation, nor pleasure, can be borne beyond this degree; and the near approach of either of them to the verge of this limit, so deranges the whole constitution of the system, that dissolution is frequently the consequence. And this is the case in the excitement of each of the emotions alike, if not equally.

The first of the simple emotions is that of pain, which arises in the body, and is produced by injury causing disturbance to any organic parts in the material frame so as to change their natural order and disposition.⁴ This is the simplest, and the most entirely corporeal of all the emotions that we experience.

Pain is excited immediately only through the sense of feeling; for although seeing, and hearing, and tasting, and smelling, each produce sensations in us, yet they are referred to that of feeling to determine whether they be painful or pleasant. Thus, a sight may be pleasant, or of itself excite an emotion of joy, and yet affect our sense of feeling painfully by the glare of light which it throws into the eyes. A sound may excite in our minds the most pleasing emotions, and yet occasion pain by the violent manner in which it affects our organs of hearing. A taste or a smell may be on the whole agreeable, and yet excite the sensorial organs which communicated it, in a painful manner.

⁴ According to *Dr. Richardson*, "pain is the result of rapid vibration of the nervous ether; and pain, whether it be called physical or mental, is the same event. The so-called physical pain, that which comes from a blow or cut, is excessive vibration; more than the brain can receive. The so-called mental pain is excessive vibration carried through the senses to the centre, or excited in the centres, and carried to the outlets of the body for relief."—*Theory of a Nervous Ether*, by *Dr. Richardson*, F.R.S., *Popular Science Review*, No. XLI. p. 386.

Hence, one and the same sensation may serve to produce two, or even more distinct, and indeed contrary emotions in us. 1. An original emotion of pain, by the immediate action of the sensation on the sense of feeling. 2. A derivative emotion of pleasure, or joy, which is indirectly produced in the mind by the sensation. 3. A derivative emotion of pleasure, or joy, which is communicated from the mind to the body.

This circumstance produces an important effect in modifying the power and influence of many of our sensations and emotions. If emotions of a particular class tended solely and entirely in one direction only, either to pain or to pleasure; while those allied to the former of these feelings, were shunned and but seldom excited, we should be ceaselessly striving in every possible manner to excite those allied to the latter.

The affection of the material frame by the emotion of pain, will, in many cases, be extended to the mind, and produce a counterpart sensation in that being; and the soul will be thus roused to aid in the preservation from injury of the material frame; to which it will be further prompted by the circumstance that any feeling, of this nature in the body, is forthwith reflected or communicated to the soul, and is a cause of pain in that part of our being. A sensation of pain is also produced in the mind, by many causes altogether independent of the feeling in the material frame, and by its own operations alone. This feeling, when it is excited either directly or indirectly in the soul, and which constitutes a mental emotion, is called grief.

Grief is, indeed, called forth in the soul, in a manner closely analogous to that in which pain is produced in the body, any disturbance or disarrangement of the mental system or being, or any violation of its feelings contrary to its natural order and course, being calculated at once to occasion it.

Different persons probably differ extensively both as regards their liability to suffer pain, and the degree to which they are each individually affected by the same amount of pain; and this as regards both material and mental pain. Some are much more susceptible of the slightest sensation, both material and mental, than are others. Some persons probably feel pain much more acutely than do others. And some have much more fortitude to bear it than have others. The same person moreover varies in each of these respects at different times. Our susceptibilities and liabilities here, are dependent upon not merely our material, but our general moral and mental being, the strength of our frames, the vigour of our minds, and the energy of our whole constitution.⁵

* *Dr. Carter Blake* remarks on this passage, that "various races of men also show a different degree of susceptibility to pain, and to the influence of drugs. The Indians of North America require larger doses of calomel, and bear surgical operations with less pain, than the whites."

As the origin of corporeal pain may be ascribed to the disturbance of the natural economy of the material frame, and that of mental pain, or grief, to a corresponding disturbance of the mental economy; so corporeal pleasure, on the other hand, arises from, and is caused by, whatever tends to restore the natural order of these parts, in other words, to allay pain. This disturbance or restoration may be occasioned by mere over-exertion, or by the natural and due exercise of any of our organs, either of which is, in certain cases, productive of pain or pleasure; these two emotions serving as the sentinels to warn us against abuse of our powers of action.

From what has been premised, it results that the transition of the condition of the material frame from a state of pain to one free from that sensation, is seldom, if ever, a change to a state of indifference; but the mere relief from the pain causes it to be a feeling of actual pleasure. And this is one origin of this emotion. Any sensations in the body which affect it, either by relieving it from direct pain, or producing an agreeable feeling in it by any other means, excite within us the emotion of pleasure, which consists in a healthful and peaceful state of gratification, and placidity, and satisfaction.⁶ The body indeed experiences this result when relieved from hunger by food, especially if that food be acceptable to the palate; or when relieved from a cold and piercing atmosphere to one of a warm and agreeable temperature. There are also many sensations which, whenever they excite the frame, and in whatever state it may be at the time of its being so excited, produce the most vivid feelings of pleasure; such as the gratification which is derived from drinking a delicious beverage, although thirst may not previously have existed. Thus men take wine, not to appease their appetite, but because the taste of it is agreeable.

The emotion of pleasure, like that of pain, is also excited in the mind, and when produced there is commonly called joy. This mental emotion arises both from the connexion between the sensations of the material and the spiritual being, and also from the sensations of the spiritual being itself, which is as capable of experiencing joyous emotions from its own action or being, as from the body, and is also able to receive them independently of the latter. Joy, therefore, originates in a manner closely analogous to that of pleasure, it being caused by whatever is calculated strongly to urge forward the mind in its due

⁶ According to *Hobbes*, enjoyment consists in, or is caused by, success in obtaining the object of the will.—*Leviathan*.

He also contends that felicity consists, not in tranquillity, but in a perpetual progress from one desire to another.—*Ibid*.

One writer asserts that every action is pleasurable which is not painful.—*Smee on Instinct and Reason*, p. 44.

and natural course of action, or by any circumstance which has the effect of relieving or correcting the disturbance or violation caused by grief. Nevertheless, the mere absence of a particular evil cannot amount to, or constitute, or occasion pleasure; nor can the mere absence of a particular good, amount to, or constitute, or occasion pain. But the negative in each case produces simply indifference, which is the medial condition between the two. It is the positive condition, or excitement only, which in any case calls forth either of these emotions.

The recent departure of either pain or joy, produces nevertheless the opposite emotion, from the contrast afforded between our late and our present condition. Pleasure is, however, doubtless, in reality, quite as positive, and as actual as is pain, and not, as some have contended, the mere absence or intermission of the other emotion.

Pleasure and pain have, indeed, been asserted to be identical emotions, and to differ only as to the degree in which these emotions are experienced, the nature and quality of them remaining the same. This is, however, unquestionably an error, and it arises from mistaking the cause of the emotion, which is a sensation, for the effect produced by it; as the same sensation operating gently may occasion a pleasurable emotion, which, forcibly exerted, will produce one of a painful character. Here, however, the two emotions themselves are quite different, although both springing from a cause which is in its nature the same. Pleasure and pain are indeed, as it were, the opposite and the context of each other. Although so entirely contrary, they are nevertheless, as it were, conjoined by their very opposition. One seems hardly complete without the other, to which it ever has reference, and each seems dependent on the other.

Both pain and pleasure, although immediately excited by, do not by any means obviously arise out of the sensation of feeling, which may appear to be unconnected with them. Nevertheless, neither bodily pain nor bodily pleasure are ever excited quite independent of this sense. Thus, the mere ebb and flow of the animal spirits, and the alternate exhilaration and depression which are thereby produced in our frame, are of themselves an immediate and direct cause, to a certain extent, of pain and of pleasure, both corporeal and mental, through the sense of feeling being internally excited; and it generally happens that, according to the condition of the animal spirits, a stimulus or resistance is given to either pain or pleasure whenever they are experienced. The flow and exuberance of the animal spirits are, moreover, at once accelerated, if not produced, by pleasure or joy, whatever be the condition of these spirits, or of the material frame. What appears singular, however, is that while the mental emotions of joy and grief are immediately con-

nected with, and dependent upon the flow and ebb of the animal spirits, which are entirely and purely of a material nature; the corresponding material emotions of pleasure and pain, are only to a much less extent dependent upon, or affected by, any change in the animal spirits.

It would seem as though the mind was ever more prone to run into emotions of a painful, than into those of a pleasurable nature; inasmuch as while the fear of the loss of any good, directly produces grief, the hope of gaining any good, also as surely, although indirectly, produces grief, by the fear and anxiety which it excites, lest we should fail to attain the object desired. The fact is, however, that the fear of ill, and through that, grief, is ever more apt to be excited in this life, than the hope of good. In a state of future bliss, the reverse will probably be the case, and every excitement will then tend to joy instead of to grief.

Pain and pleasure, grief and joy, especially when excited to a large extent, particularly the two latter, are hardly ever unmixed, and the one alleviates or counteracts the other. In the greatest distresses, there is generally some one strong consolation: in the greatest enjoyments, some one deep source of anxiety.

Pleasure and joy, pain and grief, although counterpart emotions, are nevertheless essentially distinct and independent as regards their effects; inasmuch as the most intense pleasure may fail to produce joy, or the most intense pain to occasion grief.

The next of the simple emotions is that of irritation, which arises both in the body and in the mind, and is produced and exists in each independent of the other. It consists in an intense and vivid feeling of excitement to action of some kind or other, according to the nature of the stimulus, or its producing cause; whereby the being affected by it is at once induced to exert himself, and to some extent to change his condition.⁷ The term irritation is most commonly applied to the perturbation of the soul by anger. But whatever agent serves immediately and readily to move it, whether by anger, mirth, or concupiscence, operates in reality by irritation.

Irritation is the incipient element or germ in the production of uneasiness, whether material or mental; and uneasiness terminates in dissatisfaction. This emotion both impels us towards action, stimulating us to move into a new condition, and repels us from that in which we are at present

⁷ According to *Burton*, *Scaliger* added a sixth sense to the number of those generally acknowledged and classed as such, which he termed "titillation," and which appears closely to correspond with what I have here denominated the emotion of "irritation."—See *Anatomy of Melancholy*, pt. i. s. 1, p. 22.

existent. Irritation is, however, strictly and essentially, neither pleasurable nor painful; but the only, and the essential and immediate and direct result of it is, at once to stimulate us to exertion, by an eager and vivid desire to do some particular act in order to gratify the impulse created. This emotion, when excited to an extensive degree, is very powerful, indeed wholly irresistible as regards its influence to impel us to action. We seldom, however, experience it except in a limited extent, and are consequently able at once to appease it. Supposing it were allowed to excite us with the utmost vehemence of which we can conceive, and that we possessed no means whatever of appeasing it, no torment can be imagined to be really more intense or more intolerable than this.

Irritability, or the liability to irritation, may, however, exist quite independent of sensation, or even of life; as in the case of certain chemical substances which are at once excited to action and mutation, on the application to them of certain other substances.

One of the most remarkable features in irritation, in which respect it differs entirely from both pleasure and pain, is the absolute and direct manner in which it is both appeased and terminated by obtaining the object towards which it is excited; and the circumstance that it aims directly and solely at some immediate object, for which it creates a strong and almost irresistible impulse. The other emotions are neither so easily or so readily satiated at once by any gratification of them, nor do they immediately aim at a particular object. And this is true alike of the simplest emotions of this kind, and of those that are more complex which spring from it. Even in the exercise of concupiscential desire or appetite, the satisfaction, probably, arises quite as much from the cessation of the irritation, as in the experience of the positive direct pleasure which the gratification of the appetite produces.

As some flavours excite the palate, which are neither sweet nor sour, but simply sharp and stimulating in their tendency; so certain emotions are neither painful nor pleasurable, but are indifferent in this respect, and, as it were, between the two, although equally excitable, and equally powerful when excited, with either of them. Of this nature is irritation, which differs essentially also from uneasiness, in that there is no pain necessarily connected or associated with it. In irritation there is neither actual pain nor actual pleasure, but the emotion is essentially, and intensely, agitative.

Irritation is, moreover, essentially a simple emotion, although, as it may be excited by so many causes, it often appears compounded of several different emotions, or sensations. One cause only, however, as in the case of pain and pleasure, is sufficient

to produce it ; and it is as simple in its nature, as are either of those emotions. If, therefore, it be objected that irritation cannot be a primary independent emotion, inasmuch as it appears to be complex and not simple in its nature ; it may be replied that it is at least as simple and as independent as either pleasure or joy, pain or grief ; and it is, moreover, ordinarily produced by causes which are essentially less complex than are those occasioning any other emotions.

An emotion has been defined to be a strong and urgent excitement to action, proceeding from, and produced in each case by, a sensation. Irritation surely may be comprehended under this definition. But, as it cannot be said to be actually pleasurable, or actually painful, it must necessarily be an emotion independent of either of these qualities. And its urgent excitement of us to action, at once proves it to be, and at once constitutes it, an emotion.

Although irritation arises or originates almost entirely, if not exclusively, in the sense of feeling, and seldom, or never, in that of touching ; yet, equally with the other simple emotions, it is mental as well as material, and may originate either in the sensitive feeling of the body, or in that of the soul itself, wherein I have contended that sensation essentially and ultimately resides : and the emotion springing from either being may be communicated to the other, or not, according to the circumstances connected with its exciting cause. Mental, as well as physical irritation, consists in that irresistible stimulus to action, which at once compels us to exertion, not by either attraction or repulsion, but by simply exciting us to motion. Laughter, which results from mental emotion, is perhaps one of the commonest and most vivid excitements of this kind, and is also effected through the operation of the capacity of wit.⁸ But whatever cause directly and irrepressibly stimulates us in a gentle, not a violent manner, is productive of, or the result of, mental irritation.

Irritation, both material and mental, is the source or producing cause, jointly and in common with the other simple emotions, material and mental, of most, if not all, of the complex emotions, and of the actions springing from them ; as also, which will presently be pointed out, of the appetites and passions.

Nevertheless, irritation of the body does not, by any means, necessarily produce mental irritation, any more than mental irritation necessarily produces that of the body. Mental irritation is occasioned by that which is corporeal, in those cases only where the irritation of the body is of such a nature that it is closely allied to that which is mental ; and where the excite-

⁸ *Vide post*, b. iii. c. iv. ss. 2, 5, 6.

ment of the corporeal emotion is directly calculated, by such connexion or alliance, to excite one that is mental: as, for instance, where passion of any kind, especially that of anger, is called forth by such circumstance.

Probably, the fairest and most complete illustration of the nature and operation of the emotion of irritation, both mental and material, is afforded by the corporeal feelings termed tickling and itching, which consist in a sensation arising in the body, not absolutely painful, nor pleasurable either, but in the highest degree stimulating and exciting, which are extremely impatient of endurance, and demand at once to be allayed. These feelings, indeed, are a species of material irritation; and irritation of the mind is closely analogous to them.

As physical irritation is ordinarily occasioned by causes which are apparently very trivial, and even inconsiderable, such as the bite of a small insect, or its merely settling upon our face or hand, or flying near us, although the excitement to action which it produces is very vehement; so mental irritation often proceeds from causes correspondingly trivial, while it excites more vigorous impulses to action than circumstances of far greater consequence.

We may not unreasonably conjecture that the torments of a state of perdition, as at once the most exciting and unendurable of which we can conceive, are mainly of the nature of irritation, more especially which is mental; being both very intense in their quality, and ceaseless in their operation, but without being accompanied by any possible means of appeasing them.⁹

That irritation is more powerful, more exciting, and more unendurable than even acute pain itself, is obvious from the fact that both men and animals, when suffering any irritable emotion, such as itching or tickling, will at once, voluntarily and eagerly, encounter certain and immediate pain, and that to a considerable extent, in order that it may relieve and take the place of irritation. On the other hand, we do not find that irritation is ever voluntarily encountered in exchange for pain. It is remarkable, indeed, that all our greatest physical delights originate, or rather centre, in the appeasement of irritation. Such is the gratification of the appetite of concupiscence, and such is the appeasement of hunger, and more especially of thirst; the predominating pleasure in each of which consists in allaying the irritation which those appetites had excited.

The origin and action of instinctive impulse, moreover, owe probably much to irritation, both material and mental. Even vegetation, in its growth and development, seems to a certain

⁹ *Vide ante, Prel. Diss., s. vi. a. 3, p. 113.*

extent impelled and directed by irritation. The bursting of the bud is caused by the irritation produced by the genial heat of spring, and the shooting forth of the seed is excited in the same manner.¹

Irritation, whether of mind or body, is very useful and highly serviceable in stirring us up to exertion, and in rousing us to move from a position or condition which threatens evil. Pain, irritation, and pleasure are the grand leading and original incentives to action, both mental and corporeal; pain being repulsive, irritation simply motive, and pleasure attractive. The operative influence of pain and pleasure will be questioned by none; and if we consider how much the appetites, and also the passions, owe to irritation, its strength and influence will appear in no respect inferior to those of the two other leading and simple emotions. Indeed, it is to the power of irritation, that concupiscence owes the vast influence that it possesses, and so extensively exercises.

The emotion of surprise is one of an entirely simple nature, which arises only in the mind, or in the instinctive being in the case of animals. It is caused by the sudden shock or impulse which is produced by the communication of some unexpected intelligence, or the appearance of an object wholly unlooked for, the idea of which the mind was unprepared and out of order to receive, and which causes a sudden excitement of the mind, analogous to that which would be produced in the material frame, and the bodily feelings, by any sudden and unexpected shock to, or violent distortion of, the body or its organs, in which an emotion of this nature is produced; but which, even in this case, originates solely and entirely in the mind, which alone can be in the first instance affected by surprise, even though that was caused by a sensation in the material organs.

Surprise exists in various different degrees, and is always sudden and transitory. When it is very powerfully excited, as by any unnatural or extraordinary event or catastrophe, so as to occasion a bewilderment of the faculties, it is termed astonishment. This emotion is an entirely independent one of itself. It belongs essentially and necessarily neither to pain nor to pleasure, to one or other of which all the other emotions, except that of irritation, are allied; but it is of an absolutely neutral kind. It differs also essentially from the feeling arising from novelty. By the latter, a succession in the mind of new ideas is produced. In the case of surprise, the ideas are not only new, but altogether unexpected, as also different from what

¹ The late *Dr. Darwin* in his *Zoonomia*, and *Tupper* in his *Sensation in Vegetables*, attribute "irritability," which I understand to be identical with "irritation," to plants.

we had anticipated. In the case of novelty, the succession of ideas merely produces joy, but without any excitement from its variety.

Surprise is, nevertheless generally, although by no means universally or necessarily, connected with one or other of the simple emotions of pain and grief, pleasure or joy; and from being ordinarily thus associated, it is apt to be regarded as itself a complex emotion. In most cases, moreover, it owes its force to this conjunction; and it is not by itself capable of producing any powerful effect beyond the agitation which it momentarily excites, or of procuring any permanent result. When, however, it is accompanied by pain or by fear, its effects are very violent, and very extensive.

The emotion of surprise may be excited by impressions upon any one of the senses; more especially upon that of feeling and touching, seeing, or hearing. An unlooked-for sensation, either mental or physical, coming suddenly and unexpectedly upon us, at once shocks us, and thereby produces this emotion. Good news affects us as much or more than bad news, if it arrives abruptly. But in these cases it is the surprise itself that in reality produces the shock, which is only greater in the announcement of good than of bad fortune, because it is more entirely unexpected, and causes a more extensive change in our position. Announcements of this kind to our minds, are analogous to sudden and great changes in our physical condition, as from heat to cold, from darkness to light, or from repose to action.

4. *Influence, Use, and Functions of the Simple Emotions.*

The subject which appears next to demand our attention, is the consideration of that which constitutes the main and essential importance of the simple emotions, being the extent of their influence, and the value and mode of their operation in the economy of the system of man, both mental and material.

In the regulation of this economy, the simple emotions correspond with the principles of attraction, disturbance, and repulsion, in the economy of the material world, already alluded to. They are both the originators and the directors of most of our actions.²

² Pleasure and pain, says *Aristotle*, are the ultimate moving principles which set all the desires and passions to work.—*Ethics*, b. iii. c. 2.

They appear to me, however, in conjunction with irritation, to be rather the immediate than the ultimate cause of action; and I have contended that the complex emotions are the ultimate ends.

According to *Locke*, "pleasure and pain, and that which causes them, good and evil, are the hinges on which our passions turn."—*Essay on Understanding*, b. ii. c. 20, s. 3.

The simple emotions are of very constant recurrence, although ordinarily but of brief duration, and are in a perpetual state of fluctuation. They are the principal, the original, and the most important of all the emotions; and, as I have before observed, they form the grand stimulus to activity, both of the body and of the soul. These emotions also constitute the primary, and the final cause of all our actions. By pain, and occasionally also by grief, we are repelled from particular objects and courses; by irritation and by surprise, we are roused from a quiescent state to exertion; and by pleasure and joy, we are induced or impelled to a particular line of conduct. The avoidance of pain and grief, and the attainment of pleasure and joy, are what ultimately direct us in the pursuit of every action through life. Irritation is, however, equally powerful with either of them in rousing us irresistibly to exertion.

On the one hand, the pursuit of pleasure, and contemporaneously with it, the avoidance of pain (both terrestrial, I mean), are, if theologians speak correctly, the principal bane of our lives, and are what lead us, ultimately, to perdition. On the other hand, the pursuit of pleasure, and contemporaneously with it the avoidance of pain (both eternal, of course, and not merely temporary or terrestrial), are, if we are taught rightly, the main stimulants to good actions, and are what principally urge us on in our career to the attainment of final glory.

But it may be said that in many cases, so far from pain or grief impelling us from a particular subject, and causing us to shun it, we often voluntarily encounter pain, and shun pleasure; apparently too without either reason or motive. Not a few indeed there are whose lives are spent in, and whose main and ceaseless occupation is the pursuit of that which is pleasurable; but who so carry out their design as to make for themselves a hell upon earth, and heap upon themselves bitter and constant torments, as though for the dire fate to which they are hastening in another world, they are too impatient to wait. In other cases, men seem eager to brood over subjects which are in every way painful, and cling to topics which are apparently repugnant.

In all such instances, however, it is the blindness, or the folly, or the extravagance, with which pleasure is sought, that causes pain to be the result; as when men in the eager pursuit of the delights of avarice, lead lives of penury, and sacrifice all enjoyment of what they have, for the sake of gaining what they may never obtain.

As regards the case of persons brooding over miseries which appear repugnant to contemplate, I would observe that they do not brood over them because it affords them satisfaction to do so, but because they are anxious to watch them narrowly, and, if possible, to find out some means of alleviating or averting

them; as men are ever wont to flock to, or to tarry about, a scene of danger, not however with the desire of being among the sufferers, but from a curiosity to ascertain the cause, or to witness the progress of the calamity. In both cases, the relief of the evil would be hailed with the utmost satisfaction.

Bodily pain, indeed, we may sometimes voluntarily inflict or prolong; but nobody would venture to assert from this fact, that we are naturally desirous of enduring pain. As in the case of grief, we only do so to ascertain its cause, or to discover a remedy for it. Whatever is in any degree the subject of, or causes fear in the mind, will attract towards itself a very large share of curiosity and attention. Probably, indeed, no emotion so strongly rivets the attention as does fear.

In some cases, however, it might be urged that, so far from seeking for, or desiring pleasure, or joy, we actually seem to prefer pain and grief to them, and are impelled towards the latter instead of the former. Thus, we eagerly go to witness a tragedy, which is calculated to awaken in the mind the most painful emotions. Here, however, I would remark, that oftentimes the excitement which is caused by tragedy, is in its effects, although immediately painful, ultimately pleasant. Besides which, on these occasions we expect that the catastrophe which we are witnessing, will shortly be atoned for and compensated by happy events about to follow; and indeed our disappointment when this is not the case, is the best proof of the correctness of my theory.

The pleasures of youth are, as it were, allied to those of comedy,—bright, buoyant, and fleeting. Those of age are, on the other hand, allied rather to tragedy,—deep-felt, intense, and durable. But it does not follow that because these latter emotions are not lively and gay, they are not of a pleasurable nature. Indeed, those subjects which afford the most intense pleasure, are all of the graver kind. Tragedy, in reality, yields more real and substantial delight than does comedy.

The emotions of the mind are more powerful than those of the body; although in its present state, while united to the latter, the soul is incapable of experiencing to their fullest extent the influence of emotions of the former kind. Hardly any idea can enter into the mind, or be recalled by the memory, without exciting to some extent at least, one or other of these emotions; and each feeling which we experience, however slight, and whether of the mind or of the body, is more or less tinged by them. There is, indeed, this grand difference between the emotions of the mind and those of the body, that the former may be excited by any ideas, or recollections, or anticipations arising in the mind, whether relating to past, present, or even future events or objects; while the latter, except when produced by the former, can be caused only by

some present object actually affecting the body, high happiness of feeling.

The mental emotions of grief and joy, nevertheless, often produce in the body strong emotions of pain and pleasure. This they appear to do through the mysterious medium of the animal spirits, which, in the one case, are condensed or subdued, in the other, expanded or exhilarated. In common language, in the one case we are said to be in low, and in the other in high spirits. The emotions of pain may, moreover, be as fully communicated to the mind by the recital of some evil affecting us, as by the actual occurrence of evil to the body, which causes pain or grief to arise in the mind. Mental anguish, and even disquietude, often affects us more than does severe bodily pain. We experience greater agony from an attack on our reputation, than from one upon our person; from the torture of the soul, than from the torment of the body.

As an illustration how much more powerful mental pleasures are than those which are material, might be instanced the case, already cited, of the superior mental delight experienced by a mother in giving food to her craving offspring, beyond that which would result from eating that food herself, however hungry she might be. On the other hand, the material emotions are so far more influential than those which are mental, inasmuch as while the mental generally act alone, those which are material always excite the mental along with them. The circumstance, however, that, even in this life, the fear of evil, which is a mental emotion, is almost always greater than the evil itself; affords proof how much more powerful are mental than physical emotions, inasmuch as the soul is more influential in the government of our conduct than is the body. So also as regards the delight arising from retrospection, which is also a mental pleasure, but which is often far greater than the physical enjoyment itself to which it relates.

It might also be urged, in order to prove how much more vigorous and influential are the emotions of the mind than those of the body, that although a very slight degree of mental disquietude may destroy our happiness, whatever may be our physical condition and comfort; yet that with considerable physical discomfort we may be happy, if our minds are at ease. But there is possibly some fallacy here, consisting in the substitution of mental quietude for our whole condition as regards happiness; whereas mental discomfort extends only to our mental condition, while bodily discomfort affects only our bodily condition. Neither of them however influences our whole condition. On the other hand, what bodily torture is equal to the pangs of a wounded conscience? Moreover, bodily pain never depresses the spirits as does that which is mental, and does not so frequently disturb the reason. Madness is often produced

as, but very seldom by physical pain. The effects of physical pain seldom last after the pain itself is removed. But the effects of mental pain are often permanent as regards both the body and the mind.

In the general character of their features, and at each stage in their operation, there is a close analogy between the pains of the body and those of the mind; and injuries to one part of the system produce results very similar to those endured by the other. Thus, both as regards the body and the mind, some pains occasion permanent injury to the being who is affected by them, even when they are speedily removed; while others occasion no injury beyond the pain itself, and all traces and effects of them vanish on their removal. Pains of both kinds, moreover, operate beneficially as a warning, and as a stimulant to exert ourselves to escape from the evil of which they apprise us.

In the case both of mental and material emotions, pleasure and pain are most commonly produced by some change in our condition from a previous state, compared with which the present one is contrasted, and an emotion of pain or pleasure is excited, according as we have improved or deteriorated in our position. Both in the mind and in the body, a state of insensibility or apathy is that which exists when neither of these emotions affect us, and there is, consequently, no stimulus to action. Hence, freedom from pain and grief does not of itself necessarily produce the opposite emotion, but insensibility to either is the result; so that it would seem as though a feeling of non-existence, or rather a condition of unconsciousness, is the natural and most perfect state in which we can be permanently placed. Thus, as I remarked in the case of the bodily organs, the mere sensation or consciousness of their operation, is an actual notice to us that they are out of order. Moreover, whenever we are in a condition of either pleasure or pain, the natural tendency and inclination of the system is always to relapse into this state of insensibility. Even the attainment of objects the most desired, brings with it but very fleeting pleasure, and apathy soon returns. This is probably the efficient cause of there being so great an equality of happiness diffused through all classes of mankind, as the only permanent settled condition in which men exist, is this state of apathy—one neither of pleasure nor of pain, but, as it were, forming the level between the two, into which the mind naturally gradually relapses as excitement, creating emotions of either kind, mental or bodily, subsides. Contentment, which is nearly allied to, and springs out of, this condition of apathy, appears to be the highest permanent attainable state of well-being and comfort of which in this life we are capable. This is, moreover, the only feeling that does not consume itself. In a future state it is

probable that we may be as capable of permanent high happiness, as we now are of permanent contentment. It is not often, however, or for long together, that any one continues wholly and entirely even in a condition of apathy or insensibility; as every flitting sensation or idea contributes to excite an emotion which, like a passing breeze, may disturb the tranquil surface of the mind.

But, although a change in our condition is that which ordinarily excites both pleasure and pain, yet, if this change is too sudden, be it mental or bodily, it is always painful, even when the transition is to a pleasurable state. Thus, if merriment be at once introduced amidst sadness, like heat, though but genial, suddenly following cold, the immediate change is disagreeable and painful.³

The simple emotions are of themselves, and each of them, entirely involuntary. We can neither prevent, repress, nor control their excitement. The causes which excite them we can, however, oftentimes avert or modify, as the blow which produces pain, the warmth which occasions pleasure, or the circumstance which causes irritation; but we have no power whatever to prevent or mitigate these emotions, when the influences producing them have been suffered to act. In some instances, indeed, we may be able to divert the attention of the mind from any particular emotion, by causing others to arise, and thus apparently restrain its efforts, by counterbalancing its effects and operations.

The existence of pain, although it seems of itself to imply a certain degree of imperfection in our constitution, is in reality more directly serviceable to us, and that both as regards mental and bodily pain, than is the enjoyment of pleasure. Nevertheless, a very moderate extent only of pain is either actually necessary to be endured in order to pass through life, or essential to promote our general well-being by stimulating us to actions of different kinds. Probably most animals, especially in a state of nature, and possibly many men, even in an artificial state of society, contrive to escape with a very small share of it. The only pain really inevitable, is that which accompanies or precedes death, which, however, may in some cases be very slight, as in the case of sudden death by apoplexy or heart disease. Death in the natural course, or by old age, is also comparatively painless. Indeed, nearly all the necessary pain that men experience, even that which accompanies old age,

³ *Dr. Richardson* remarks that "under mental labour or emotion, nerves bleed as vessels do;" and that "under violent shocks the whole nervous atmosphere is thrown into vehement vibration, the heart is held fixed by the commotion, and the failure of animal force is followed by sudden and overwhelming prostration."—*Theory of a Nervous Ether*, by *Dr. Richardson*, F.R.S., *Popular Science Review*, No. 41, p. 386.

is brought upon them through disease engendered by their own irregularities or artificial habits. Having all their lives done violence to nature, nature is at last driven to retaliate upon them.

A question of considerable interest, and of no mean importance as connected with the subject of the present chapter, may be raised as to which of the simple emotions of pain, irritation, surprise, and pleasure is the most powerful and influential on the whole, and which of them is productive of the most substantial results.

It appears to me that on the whole, the desire for, and the enjoyment of pleasure, have in general more influence over our conduct and actions, than the dread and the experience of pain. The influence of the former moreover extends wider and further than does that of pain; although, when we are actually experiencing its operation, probably pain is the most exciting. Irritation, when directly called forth, and in an equal degree, is the most stimulating of the three, but its influence is less extensive and permanent than that of either of the others. It is probable that all animated beings are, if not to the same extent, in a manner nearly similar, excited, and affected, and influenced by pain, irritation, pleasure, and surprise; however widely they may differ one from the other as regards the particular causes or circumstances which in each particular person are most calculated to produce those emotions, and as to the influences by which they are swayed. When, however, these emotions are once aroused, the actual *quantum* of effect resulting from them, varies but little in different individuals.

It may, perhaps, be admitted as a proof at once of the superior power and influence of pleasure over those of pain, that greater effects appear to be produced by the occurrence of events which cause intense pleasure, than by those which cause intense pain. Madness, for instance, is more frequently occasioned by sudden prosperity than by sudden adversity. Another proof how much more powerful, as regards the extent of its influence over the conduct, is pleasure than pain, arises from the fact that many persons, in order to gratify their appetites, the pleasures arising from which are but very transitory, will readily and knowingly incur not only the risk but the certainty of much and long-continued pain as the consequence of such indulgence; and that too in a measure far exceeding the amount of pleasure that either is, or is calculated to be, derived from the act in question. That pleasure is more influential than pain is further evinced by the circumstance that men will often voluntarily endure considerable pain, when urged to do so by the prospect of some pleasure as the result; while we do not find that they are equally apt to relinquish pleasure, merely because pain is likely to be

consequent upon its enjoyment. And as an additional proof that pleasure has greater influence over our conduct than has pain, we may refer to what has been already pointed out, that not only will men pursue pleasure, although with the prospect of certain pain, and even incur much pain for comparatively little pleasure; but that for an uncertain pleasure, they are ready to undergo certain pain.

5. *The Complex Emotions, Attachment and Aversion, Fear and Hope, Sorrow and Mirth, Suspense, Curiosity, Pride, Shame, Pity, Admiration, Envy.*

The nature and constitution of the different simple emotions, which form, as it were, the primary and original causes of action, both mental and material, in the system of man, having been now fully inquired into; we have next to direct our attention to those which are complex, being compounded of different simple emotions only, or of different operations of the mind conjoined with such emotions. Emotions which are thus constituted, although they are less frequently excited, are also less transient and fluctuating than those which are of a simple kind, or which are compounded of emotions alone. The influence which the reason possesses over them is, to some extent, the cause of this result.

Thus, if we proceed to analyze the first of the complex emotions to which our attention is directed, that of attachment, we shall find that its constitution is formed of a simple emotion, conjoined with a conclusion resulting from an operation of the mind, and directed towards an object, the whole being blended together into one emotion. When an emotion of pleasure, either mental or physical, is excited in any individual, and the mind denotes a certain circumstance, or action, or object, as a particular pursuit, or study, or person, as the cause of that feeling, such cause itself becomes an object of pleasure or joy; or that resulting from the action it has produced is transferred to, or associated with it; and thus towards such object is excited that compound emotion which we denominate attachment.

Hence, the object itself comes to be regarded with the strongest feelings of attachment: and the person in whose society we have found pleasure, or the place where we have passed our time agreeably, appear to stand in the stead of the emotions which they produced; and by the intimacy of their association with them in the mind, occasion, whenever they are recurred to, a repetition or vivid recollection of these delightful feelings.

The emotion of attachment is, however, very different to the excitement termed affection, considered at length in a subsequent chapter,⁴ of which it is but the incipient germ, and one only of the constituent elements.

The emotion of aversion, which forms, as it were, the context to that of attachment, is caused by the feeling of pain or grief, and an operation of the mind which points out some particular action, or subject, as the source of that sensation, and to which the emotion of pain or grief so produced becomes transferred, or is associated with in the mind. This feeling, although commonly joined with the passion of anger, is totally different from it, both in its constitution and effect: it is less violent in its operation, but more durable; and any circumstance or inanimate object may be the subject of it, while anger can only be excited by or against an intelligent being. Malice arises when anger is provoked against some person, and is ripened into a desire for revenge. It might not unaptly be termed, wrath hoarded up until it stinks.

Fear is compounded of the emotion of grief, caused by the recollection of past occurrences productive of that feeling; and of an operation of the mind which leads a person to suppose that this feeling may be repeated, or evil of a like description ensue, on account of certain circumstances which are foreseen, or expected to occur.

This emotion is of two kinds, physical, and mental or moral. Both emotions are of the same nature. They only differ as to their origin, or the immediate cause producing them; and not like pain and anguish, pleasure and joy, which actually differ in themselves. Moral fear, or, as it might with more propriety be termed, mental fear, is the fear of the soul, or that emotion which arises in the mind, and is communicated to the body; and which is caused by the dread of some evil of a moral kind, such as that which affects our honour, or reputation, or private character. Physical or material fear, as it might most properly be termed, is the fear of some injury or pain to the bodily system. These two different kinds of the same emotion, although they vary as to their origin, are in their essence and effect the same, while they are different in their results. The dread of ridicule, or of the loss of character, is sometimes as great and powerful as that of bodily injury. Physical or material fear often appears greater and more powerful, because it usually comes upon us more suddenly and unexpectedly than does moral or mental fear. But when physical fear approaches, as in the case of shipwreck, of any one dying of a lingering disease, or as in the case of persons lying in gaol under sentence of death, with very gradual, although certain progress;

⁴ *Vide post*, c. v.

it does not affect with the violence which far less appalling circumstances would do when accompanied by surprise as well as fear, the former of these emotions being an important constituent in the passion of terror.⁵ On the other hand, mental or moral fear, when it comes on us suddenly, and is accompanied by surprise, produces the most violent effects; as in the case of a person unexpectedly hearing that all his hopes of attaining honour, or riches, or fame, were totally blasted.

But although physical fear and moral fear, while differing in their origin, produce the same general result as regards their effect on the mind; yet they are not only distinct from each other, but are occasionally both excited together, and at once impel the person moved by them to an opposite line of conduct with regard to the same subject. Thus, in the case of a person summoned to undertake any hazardous enterprise, physical or material fear, or the fear of suffering bodily harm, will serve to deter him from it; while moral or mental fear, or the fear of suffering in his character or reputation, will deter him from neglecting to engage in it.

This counteraction, however, instead of proving baneful, is frequently found to be directly and essentially serviceable through life, in order to modify the too powerful influence of the action of this emotion of either kind; and to secure to the judgment that ascendancy over the conduct which it is desirable for it to assume, and also to enforce.

The passion of anger may also originate in mental or moral, as well as physical emotions or causes. Indeed, anger is more frequently excited by the former than by the latter.

It is therefore obvious that the influence of fear extends far beyond the desire and the sphere of self-preservation, at least in the case of man; and exercises its sway more or less powerfully over the whole of our actions, whether relating to matters material, moral, or mental. It keeps in awe the philosopher in his speculations, the instructor in his admonitions, the judge on the bench, the statesman in the forum, the painter in his studio, and the preacher in the pulpit. It is the fear of doing what is wrong, of incurring obloquy, of laying himself open to censure, of injuring his reputation, that restrains each of these differently circumstanced individuals from transgressing the right rule; which preserves him from error, and urges him on in the career that is correct and praiseworthy.

But, notwithstanding all this, and although fear is doubtless in many respects, and very frequently, of great value to prevent men from going wrong, and is indeed the attendant emotion upon conscience for this purpose, and what mainly gives effect

⁵ *Ide post*, c. iv. s. 3.

to the exertions of that endowment ; yet, on the other hand, it is also probable that as many bad actions are committed by man through fear, as from any other cause or motive whatever. There is a fear of doing right, as well as of doing wrong ; a fear of the Devil, as well as, if not more influential than, the fear of God.

The quality of courage, which is in part, although in part only, constituted of, or caused by, the absence of the emotion of fear, is a moral quality ; and its nature will be fully discussed when we treat generally on the moral nature of man.⁶ I will only here state that courage originates in confidence in self, supported and justified by reason. Rashness, on the other hand, consists in the same confidence, when the reason either declines to support it, or when it has not been appealed to in the matter. Modesty is caused by our rating our own position lower than reason would place it ; impudence, in placing it higher.

As the shadow is often more alarming than the substance, so the fear of events is frequently more exciting, and productive of more important results, than is the very occurrence of those events. Indeed, a vast proportion of the discomfort, and of the misfortunes too, which beset life, is occasioned by our allowing ourselves to be too much excited by fear on the one hand, and by hope on the other. Both are equally inimical to present peace. The one alarms us, in many cases, without cause. The other brings disappointment at the failure of its fulfilment, for the expectation of which we had no sufficient grounds. Indeed, in reality, the larger part both of the good and of the evil which we suffer, is endured, not in actual experience, but in apprehension only. The dread of it is often more serious than the deed itself, and the hope more sweet than the fulfilment. It is, in fact, very seldom that the full extent is reached, either of our hopes of good or our fears of ill. The reason of this is that the exercise of these emotions is immaterial, infinite, and unbounded ; while the reality of their fulfilment is material, finite, and bounded.

Hope, indeed, is the opposite and context emotion to fear. Neither of them deal with events that are present, or with those that are past, but both of them have reference to those which are prospective. Hope is attractive, fear ever repulsive, in its influence. Hope is compounded of the emotion of joy, caused by the contemplation of the occurrence of events productive of that feeling ; and of an operation of the mind, which induces a person to suppose that the events anticipated will ere long come to pass. Like fear, hope is mental as well as physical, the two different kinds differing only as to their

⁶ *Vide post*, b. ii. c. i. s. 7.

producing causes. In the case both of fear and hope, the animal spirits are greatly affected as regards their depression or exuberance, according as one or other of these emotions prevails; and, on the other hand, according to the condition of the animal spirits, are both hope and fear stimulated or repressed.

The emotion of sorrow is constituted by the excitement of the emotion of grief, the duration of which is sustained by an effort of the mind that reverts to circumstances calculated to produce, and to continue this emotion. It is also generally accompanied by a depression or ebbing of the animal spirits, which conduces much to the continuance of this emotion, although not of itself sufficient to produce it.

Mirth is produced by the excitement of the emotions of joy and of mental irritation, combined with the operation of the capacity of wit, which points to some circumstance calculated to excite this emotion through the action of this capacity.⁷ The extensive flow of the animal spirits is also occasioned by, or accompanies this emotion, and contributes to its constitution. The emotion of mirth is directly opposed to, and forms, indeed, the context of the preceding one of sorrow, which is, moreover, as distinct from mere mental pain, as mere mental pleasure is from mirth.

Of all the mental emotions, mirth is the most vivid and the most powerful, for the time usurping the place of, and at the moment overcoming, every other emotion. It is, however, the least durable, and leaves the slightest impression behind it. Not merely, indeed, the emotions, but the passions also, are subdued by mirth. It not only displaces pain and pity, but anger also for the time gives way to it. As, however, its effect is but momentary, so its influence is merely transient. The alliance of mirth with joy is one great source of its influence, as thereby it is naturally attractive, instead of repulsive, to the soul; and we are spontaneously led to encourage, instead of retarding, its excitement. Mirth may be controlled, but indirectly, by calling forth emotions opposed to it, which appears, indeed, to be the only mode of restraining it.

A question might perhaps be raised whether mirth is in reality a simple or a complex emotion, and also whether it is one originating and operating in the soul or in the body? It appears to me, however, that mirth is undoubtedly a complex emotion, and that it is compounded in part of joy, and frequently also of surprise and mental irritation; and in each case of an operation of the capacity of wit, which I shall hereafter⁸ show to be that capacity of the intellectual faculties which is employed when combinations of a mirthful

⁷ *Vide post*, b. iii. c. iv. ss. 2, 5, 6,

⁸ *Vide post*, b. iii. c. iv. s. 2.

character are produced. The emotion of mirth moreover originates, and operates also, entirely and solely in the mind ; although it is, like many other operations purely mental, both manifested, and mainly exercised, through the material organs.

Suspense is a complex emotion of the mind, constituted mainly of hope and fear as its principal elements, which are contributed in nearly equal proportions, and thus as it were balance each other; although between the two, alternate oscillations are ever occurring, sometimes the one, sometimes the other, obtaining the preponderance. Grief and joy, which are indeed constituent elements of hope and fear, also contribute to form the emotion of suspense; with which must be conjoined an operation of the mind in regard to the circumstances in which we are placed, and which aids very essentially both in the excitement and sustentation of this emotion. Hence the emotion of suspense is that condition of the mind when it is poised as it were between hope on the one hand, and fear on the other. The mind in this case fluctuates and flutters between the two, and approaches nearer to either as they alternately attract and influence it. In some respects, indeed, suspense may be said to be rather a condition or state of being, than an actual emotion of the soul. To a certain extent, however, every emotion is a condition, and every condition is an emotion. The ordinary main difference between them appears to be, that a condition is a continuing, and an emotion a merely transitory feeling. But this is by no means an invariable rule. Suspense is very frequently continuing in its duration.

There seems, indeed, to be a feeling or settled inclination in the mind, analogous to that in the body, which latter may be also derived from the mental feeling, that naturally leads it ever to abhor a condition of suspense and uncertainty, and to aim at one of repose and certainty. Indeed, of all the complex emotions, suspense is probably at once the most exciting, harassing, and unendurable; inasmuch as it includes each of the painful emotions, as regards the fear of them, in rotation, and is capable of the least satisfactory alleviation. It is more wearying and more trying than even fear itself, as there is nothing with which to grapple whereby we may resist the dread of the coming evil; whereas, when the evil is certain, we at once determine upon, and fortify ourselves with, the proper remedy. In the former case, the mind is as it were left entirely in the dark, is bewildered on all sides, and is apprehensive of attack in each direction. Suspense is like a disorder in the frame, the source and seat of which we are unable to discover, and are therefore not only unable to afford a remedy, but are apprehensive of every variety of evil consequences which belong to a corresponding variety of disorders. The occasional gleams

of hope by which we are relieved, serve only to add to the intensity of the gloom, directly that they are withdrawn. The vague uncertainty moreover in which we are placed, deprives the mind of every satisfactory solace, and the soul is paralyzed in all its efforts to extricate itself from its plight.

In most cases, the emotion of fear, or some particular care or concern about ourselves, is that which sets the senses at work when they are voluntarily excited. Curiosity is, however, an emotion of the mind constituted mainly by its desire, and consequent exertion, to acquire information upon any subject, when it is induced to this by no belief that the individual himself is affected by such subject; but the mind is moved and stimulated solely and entirely by the hope of acquiring knowledge. Hence, although man is continually excited by curiosity, in animals this emotion does not strictly exist at all.

Pride is an emotion of a complex character, constituted in part of the determination of the mind as to the superiority of some kind or other, either real or imaginary, of ourselves over those connected with us, or about us; and of the feeling consequent upon this opinion of elation or power belonging to us. Pride is very different from contempt, which is an emotion produced mainly by the operation of the mind, which marks out a particular person, or object, or action, as base, or mean, or degraded, and with which the emotion of aversion towards such person, or object, or action, is also joined.

Conceit, which is nearly allied to pride, and, indeed, an imperfect development of it, is caused by our overrating ourselves, and underrating others. Diffidence is occasioned by our overrating others, and underrating ourselves. Both arise from a defective exercise of the judgment, and from prejudice in two opposite directions.

The emotion of shame arises from the consciousness of our having done some unworthy act, or failed in performing some meritorious deed, through which we feel degraded in our own estimation, and believe that we are exposed, whether justly or unjustly, to the contempt of those who have become acquainted with our conduct. This emotion is not, however, invariably or necessarily accompanied by regret, or founded on and supported by the decision of the reason. Shame, although a purely mental emotion, often affects the body very powerfully, and is sometimes productive of the corporeal operation termed blushing.

Pity is compounded of the emotion of grief on account of an untoward circumstance affecting some living being; and of an operation of the mind from which it is concluded that the object of this feeling is undeserving of, or unable to escape the evil that has befallen it.

Admiration is compounded of an operation of the mind which proclaims a certain subject or object to be good, or deserving of

applause; and of the emotion of joy or of attachment, according as the circumstance or subject may be, which is excited towards it.

Envy, which is a sort of context to admiration, is a weed that springs up mostly in a rank and barren soil. It is ordinarily the mark of a mind of inferior capacity, which is conscious of its deficiency, and seeks, consequently, instead of aiming to rise higher, for which it is aware of its incompetence, by detraction and deterioration, to bring down to its own level, the merit that it cannot hope to rival.

All the other emotions, of whatever nature, or however varying from the foregoing, either originate in these, or are compounded in part of them.

Despair, which is produced by fear without hope, and accompanied by a present emotion of pain or grief, approaches in its effects very near to a passion, as indeed do many other of the emotions when vehemently excited. In moral as well as physical matters, distinctions are oftentimes very nice, and very difficult to perceive. Some plants and animals, and some minerals and plants, are so much alike that we scarcely know under which class to rank them. So also an emotion, a passion, and a desire, occasionally so resemble each other, as to be hardly distinguishable.

Despair, when it is very vehement and powerful, is oftentimes united with the passion of terror, which gives to it the appearance of being itself a passion; or it may be defined to be the passion of terror when the mind is deprived of hope.

6. *Influence, Use, and Functions of the Complex Emotions.*

Important and vigorous as is the influence of the simple emotions, that of the complex emotions must be proportionably greater and more powerful, according as their effect is correspondingly more extensive and more varied.

Two points should especially be kept in view as regards the efficiency of the emotions of each kind, in the attainment of the ends at which they ought to aim: which comprehend the extent to which these excitements are calculated to secure the welfare and safety of the being in whom they are called forth; and the extent to which they contribute to, and secure, his general comfort and happiness.

As regards the first of these points, there can be little doubt that in each respect, and alike medially, morally, and mentally, the general well-being of the individual is essentially promoted by the existence and due operation of these several emotions; grounded, as they are, upon the sensations, and serving to carry out completely, and more comprehensively and extensively than could be effected through them alone, their several designs

and operations. By these emotions, therefore, is exertion of each kind stimulated, activity promoted, danger guarded against, alliances are formed, mutual aid is extended, and action of every variety is caused. How useful a stimulus fear is to the development of the instinctive power, and the quickening of the activity and energy of animals; is at once shown by the degeneration which takes place in domesticated animals, which, in a great measure, arises, in addition to their senses being blunted, from the withdrawal or modification of so many of the excitements to fear.

There is this important and essential difference, however, as regards both the influence and the use of the emotions which are simple, and of those which are complex; in that while the former at once and directly excite us in some way or other, either by impelling, or repelling, or simply agitating us; those which are complex excite us in a far greater variety of ways, although their excitement is, at the same time, from the complicated and, in many respects, counteracting nature of the machinery, more uncertain, and irregular, and indirect. While the simple emotions mainly influence our ordinary actions, and direct our immediate course; the complex emotions mainly influence our opinions, and thereby direct the ultimate line of conduct that we adopt.

Another question of much interest, connected with the influence of the emotions, especially those which are complex, by which an essential test of their value is afforded, and which is the second point reserved for consideration; is that which concerns their bearing upon, and the production of, the happiness of those in whom they are excited.

If the general ultimate result of the complex emotions was to be the depriving us of happiness altogether, or even materially abridging the sum total of it; it might reasonably be doubted whether their existence could be considered as other than a defect in our constitution, even supposing it to be counterbalanced by certain advantages, either directly or indirectly accruing from it. As it is, however, not only our general welfare, but our general, and the sum total of, our happiness are, I believe, essentially promoted by the excitement of these emotions, not excepting those which are of a painful character; inasmuch as, on the whole, this happiness is not decreased, while on many occasions the intensity of it is essentially increased by these emotions. Even a condition of occasional alarm and excitement, is by no means inconsistent with a state of general happiness. Nor are the happiest lives those which have always run the smoothest. The escape from perplexities, often occasions delight far outweighing the distress which they caused. It is more agreeable to live in a country where we have to clamber up hills, although at some toil and even pain, but by

which we have grand prospects opened to us, and the purest air and the greatest variety of scenery are afforded, than to dwell in a land which is one unvaried plain. So in a corresponding manner, those conditions of life are ordinarily the most full of enjoyment, which have the most exciting pleasures annexed to them, although they may also as a consequence be interspersed with sharp pains. Thus, married life with all its trials, and cares, and restraints, is considered by the generality, as a happier condition than a single state, the troubles and anxieties of which are, however, much fewer.

In the determination of the relative degree of happiness which any person is experiencing, a great deal must necessarily depend upon the condition as regards this result, in which he has been previously placed; the one state having direct reference to the other, and serving to balance or gauge it. Thus, the happiness of heaven will no doubt be greatly enhanced by the recollection of the previous state of comparative discomfort in which we were while on earth; as, on the other hand, the pains of hell must be correspondingly enhanced, by the remembrance of the comparative ease and comfort enjoyed in our present state.

Happiness is indeed probably promoted far more by the absence of the causes of unhappiness, than by any direct positive causes of happiness. It is in fact the natural condition of created beings, in which they spontaneously and necessarily continue, unless disturbed from it. It is the health of every natural state. Unhappiness, on the other hand, and for the same reason, does not necessarily arise from the absence of positive causes of happiness, unless that absence implies some natural deprivation so as to occasion a departure from, or deficiency in, our natural condition. And as happiness itself consists in health, so health, both of body and mind, is generally essential to happiness. At any rate, the absence of it always mars happiness.

Indeed, before we attempt to determine whether we enjoy happiness or not in any particular condition, we ought first to define in what happiness essentially consists. And here we must especially distinguish it from that vivid feeling of enjoyment which we occasionally experience, but which is ever transient; although sometimes this, which is but the excitement of the emotion of joy, appears to be deemed the only real happiness that we ever obtain; and the circumstance of its being of so short a duration, is appealed to as a proof how little happiness we possess. These ecstatic delights are, however, to the general feelings and condition of the mind, what the peaks of high mountains glistening in the pure light of heaven, are to the plains and valleys which are thrown into comparative shade. A state of quietude and comfort, free from excitement,

as has already been remarked, forms the ordinary and only permanent condition as regards the happiness of terrestrial mortals. This is to a state of excitement, what the plains and valleys are to the peaks and mountains; being at once the most fertile spots on the earth's surface, and the most abundant also. A state of contentment, free from turmoil and disquietude, is attainable by all. It may often however be remarked of this condition of happiness, as such it surely ought to be considered, that we seem sometimes not to be conscious of it while we are enjoying it, in consequence of which we are induced to doubt of its real existence; although we often look back upon this state when we have passed through it, and allow of our participation of it at this past period, to the full. Just so is it as regards our impressions of the natural world. While on the plains, we are not conscious of our position either as respects the heights above us, or the valleys or deep chasms below us; but we appear to be in a state of indifference to both, except when by a reference to either of these positions, our condition by contrast with them, is illustrated. The plains nevertheless are the only eligible spots for permanent residence, although the least capacitated for exciting excursions. Here alike we escape the bleak air of the lofty mountains, and the damp exhalations of the deep valleys; although deriving genial shade from the one, and being relieved of stagnant waters by the proximity of the other. Thus, while emotion is essential to promote happiness, yet the only permanent condition of happiness that we can experience, is that of freedom from emotion.

It may, consequently, be inferred, as has already been contended in a previous section,⁹ that all persons who are in health, enjoy on an average about an equal degree of happiness; and that their emotions of each kind vary and fluctuate much about the same,—excepting, of course, those very few individuals, whose height of prosperity, or whose depth of adversity, causes an undue excitement of these emotions. But even with these persons, such a condition is but very transient, and they soon settle down to the ordinary level as regards the amount of their happiness. Tranquillity and comfort are, consequently, not only the condition common to each, but the ordinary lot of all. And to secure the permanence of this condition, and to protect them in it, the existence of the emotions of each kind, whether they are excited or not, mainly and essentially, and on all occasions contributes.

From our experience of our condition in this life, it may be difficult to conceive of a state of perfect and continual happiness in any other. But as we do experience temporary and occasional happiness here, we know that such a state is not impossible,

⁹ *Vide ante*, s. 4, p. 287.

notwithstanding the many obstacles to its enjoyment. And even here, if these obstacles were taken away—if we were permitted to enjoy uninterrupted and perfect health, if our consciences were entirely clear, and we were wholly free from care of every kind, and inhaled pure atmosphere,—our happiness would not only be great, if not complete, but permanent also, as long as these conditions lasted. In a future state, we shall be wholly and ever free from all those diseases and disquietudes which arise through the body, and our consciences will be entirely clear; the spirits will be raised to the highest pitch; or rather, what is analogous to this state, our spiritualized bodies will exist in an atmosphere wholly congenial to them. Not only care and trouble will be for ever banished, but enjoyment of the noblest and purest nature will be ever present; and what is equally conducive to happiness, ever in prospect also.

With the Deity alone, happiness is entire, infinite and complete; and He is the perfection not only of this, but of goodness and power. As in Him the fulness of all happiness exists, so from Him is derived all the happiness of which we are capable, and, above all, the highest happiness we can ever enjoy. With Him, too, happiness is as permanent as it is perfect.

7. Circumstances Mainly Contributing to Promote the Energy and Power of the Emotions.

Although apparently springing directly from the material frame, the emotions of each kind are less directly connected with, and less immediately dependent upon it, as regards both their excitement and their exercise, than are the senses, having indeed no material organs whatever peculiarly adapted for their exercise. They are, however, immediately connected with the senses themselves, originating, as we have seen, in these endowments, the simple emotions of pain, irritation, and pleasure, springing, directly, from the excitement of the sense of feeling, and all the other senses contributing to the production of some emotion; although to the sense of feeling each of these sensations has reference, whenever an emotion is excited. Indeed, when the senses, or even the appetites direct us, however vivid be the perturbation which they occasion, it is still and in each case the emotion of pain, irritation, or pleasure, which is the stimulating and motive cause and spring of action. The emotions are nevertheless to a great extent dependent, more especially as regards the degree of their excitability, on the particular character of the texture and temperament of the body, and on the animal spirits, the nervous and other vital

fluids. From this also it results, that the emotions are much more vivid and powerful in youth than they are in mature age, and that, in the latter condition they are less easily roused. The particular state of the body as regards its comparative health and vigour, also causes a very great difference in respect to both the excitability, and the vigour of the emotions. The general condition of the material frame must, indeed, necessarily exercise an important influence upon the emotions of each kind; and not only on those originating immediately in it, but even on those which originate directly in the mind; and that as regards alike their excitability, activity, and vigour. Thus, at one time, the same person, owing to the influence of these several causes, and their fluctuation, is peculiarly susceptible of grief; at another, of joy; at one period of fear, and at another of hope. Those emotions, however, which spring from, or are excited in the soul alone, are as vigorous in old age as they are during youth; although, from the decrepitude of the material organs, they display themselves less forcibly.

The causes of variety in the emotions of different persons, correspond to a large extent with the causes of difference in their sensitive system, except that organization generally has probably less influence over emotion than over sensation. Texture, not only of the material frame, but possibly also of the spiritual being as well,¹ we might, for many reasons, infer to contribute mainly to this result. In the case of the material frame, indeed, this is clearly traceable; and to some extent, in that of the soul. The difference in each person, and the variations of the same person at different periods, as regards bodily temperament, also occasion an extensive variety with respect to the physical emotions.

As some bodies are more liable than others to injury from slight causes, while others that are not so liable, when they do sustain hurt, suffer more severely; so some minds sustain injury from trifling occurrences, while others, when they are wounded, feel more deeply. Mental, like material constitutions, differ not only correspondingly, but exactly and essentially, in the same respects.

In each person, the character of the emotions seems, as it were, to reflect the general character, medial, moral, and mental, of the individual in whom they are excited; and, indeed, the influence of the emotions, and of the mode of their operation, upon the conduct of each person is obvious; while, on the other hand, on the character of each person, in a great measure depends the operation and character of his emotions. The animal spirits, however, are what appear most clearly and most correctly to reflect, as it were, the condition of the

¹ *Vide ante, Prel. Diss., s. v, a. 3, p. 80.*

emotions, and by this condition is their ebb and flow mainly regulated ; as it is by their ebb and flow, on the other hand, that the emotions are indirectly regulated, although external events and causes are what most directly and mainly contribute to this result. The animal spirits, in this respect, correspond, in the economy of man, with the public funds in the economy of a nation ; the alternate rise and fall and fluctuations of which serve as a sure reflection or index as to the general condition, and prosperity, and feeling of the state.

Of the various simple emotions, irritation, if not the most directly dependent upon the material frame for the facility and vigour with which it is excited, at any rate appears to be the most obviously so dependent ; and, indeed, on the texture and temperament of that frame, as also on its organization, and on the character and condition of the vital fluids, appear mainly to depend, not only its own irritability, but that of the mind, which is immediately derived from that of the body.

The sympathy in feeling which exists between different minds, even when the individuals are placed under circumstances different to those of each other, has often a powerful effect in calling forth mental emotions in various persons, of the same nature, or of a corresponding class or character. Thus, the visible excitement of grief, irritation, joy, aversion, fear, hope, curiosity, pity, admiration, and many other emotions, in one mind, is rapidly and forcibly extended to the other minds in communication with such person. The emotion is, as it were, contagious ; and the excitement spreads from soul to soul.

Emotions of each kind, both material and mental, and those allied both to pleasure and to pain, are ever wont to become deadened by constant repetition ; or rather, the causes which excited them cease to act, when they have been several times applied. Thus, many objects which called forth emotions of aversion and disgust, when they were first viewed, from familiarity with them lose entirely the power to excite any such emotions. And, in a corresponding manner, many subjects which, when originally brought under our notice, excited the liveliest emotions of pleasure ; as soon as we have become familiar with them, fail at all to move us. Even with any particular emotion of pain, if not with pain generally, the body in time becomes familiar, and ceases to be much moved by the same causes that at first violently agitated it. In each of these cases, probably, the actual sensation itself is as forcible, and as clearly perceived, in the last instance as in the first ; but the mind it is that is less moved by the communication of it, when it has become familiarized with the feeling. The emotions of each kind, whether mental or material, are indeed to a large extent dependent upon the mind, which controls, impels, and directs

their excitement. Even those emotions which spring immediately from, and reside essentially in the body, such as that of pain, are subject to mental control, in the degree and in the manner which I shall point out in the next section. Indeed, the extent to which we suffer corporeal pain, frequently much depends on the control which the soul has over the body; and the extent to which we suffer mental pain, as frequently depends on the control which the body has over the soul. Sometimes the influence or condition of one of these beings will lessen, and sometimes heighten the pain of the other. So is it, likewise, with regard to the pleasure endured by either.

The mental emotions are the feelings or affections of the soul, of which the intellectual faculties are the active powers. Therefore, we may often observe that the stronger the mind is, the stronger also will be the emotions. Thus, a man of vigorous mind is more vehemently affected by grief, by fear, by aversion, by hope, than is one of weak mind. An uncultivated negro, on the other hand, is destitute at once of great courage, and of great timidity and fear. He has not enough of the former to induce him to go to battle, or of the latter to excite him vigorously when dragged out to execution, or threatened with the severest tortures. In the same manner, an animal is not affected by the fear of death, although staring it in the face, nearly so powerfully as man is, having no reasoning faculty to present all the attendant horrors of its situation before it; and in its case, the emotion of fear being an affection not of the soul but of the mere instinctive being or sensitive power, only. It is also mainly owing to the foregoing causes, that men of strong minds are more vehemently affected by love and terror, than are ordinary persons. Those of very weak minds, are but little moved by either.

We may infer that in a future state, each of our senses, more especially those which are intellectual, and, as a consequence, our emotions also, will be, to a large extent both invigorated and sharpened, so that each impulse from them will be at once more powerful, and more acute. Hence, the pleasures of heaven will be far more intense than those of earth, while the pains of hell will be much greater. Irritation, too, in its excitement, will be more stimulating, and in its appeasement more gratifying; while, on the other hand, the absence of ability to appease the excitement, will render it more intolerable and unendurable than anything which we can now experience.

8. *Counteracting Impulses of Opposite Emotions, and their Control by the Mind.*

Having considered the several causes which mainly contribute

to the power of the emotions, we have next to examine those which conduce to their counteraction and control.

Of how marvellous a compound of contrarieties and contradictions is our constitution made up, even one contradiction occasioning another; just as in the material world, fire springs from vapour, and cold from its opposite element. How many a man, too, after being victorious in the field, falls a prey in the end to his success. This is, indeed, the last enemy, the most difficult of all of them to overcome, whose stronghold is established in our own souls, and whose power springs from our own vigour.

It is extraordinary, moreover, to consider to how great an extent the various emotions of each kind, and the causes of them, counteract, and balance, as it were, the influence of each other; so that we are never swayed wholly in a particular direction by any one, but some resisting current is met which prevents our being entirely carried away. Hence, in the deepest despair, some ray of hope beams in to alleviate; and in the highest exultation, some secret misgiving lurks to mar our happiness. This condition of things is, perhaps, to a large extent, analogous to the fluctuation of the seasons in the natural world; which, in the alternations of heat and cold, and dryness and moisture, which they produce, are seldom, if ever, the occasion of unmixed good or evil, or of unalloyed pain or pleasure; in the place of one evil which is counteracted, another springing up, and one benefit being obtained at the cost of the sacrifice of some other.

The power and influence of each of the senses in the economy and regulation of the conduct, mainly depend on its direct communication with the emotions of pain, irritation, and pleasure. Thus, the exercise of the sense of seeing, is not immediately and directly influential, unless it affects one of these emotions; nor is that of taste or feeling, in this respect, very important. The degree of influence of this last sense, depends entirely on its direct and immediate connexion with one or other of the simple emotions.

As man may be said to have a double existence, as regards his waking and his sleeping periods,² in both of which he appears to think, and act, and have a real being and course of life; so in relation to his feelings, and cogitations, and actions, he may be said to have a treble independent existence so far as respects his emotions. 1. As regards the events of which he is apprehensive. 2. As regards the events of which he has present experience. 3. As regards the events of which he is expectant.

If the emotions whenever excited, were all wont to tend, and

² *Vide ante, Prel. Diss., s. viii. n. 2, p. 148.*

to impel us, in one particular direction, their force would probably be almost, if not wholly irresistible; and indeed, on those few occasions when this contingency occurs, the results on the conduct of the individual are at once decisive and extensive. It is so ordered, however, by the benign economy of Providence, which is manifest in each department of our nature, as well as throughout the entire system of the universe, that it is very seldom that the whole of these emotions are excited together in one direction; and it generally happens, especially in those cases where action has to be determined upon, and which are consequently necessarily the most important, that the influence of one emotion counteracts and balances that of the other, whereby the impetuosity of each, and of the whole, becomes modified and subdued. Thus, pain counteracts at once the effect of pleasure, attachment that of aversion, and fear that of hope. The immediate and direct effect or result of terror, is to repel us from any subject or object; that of pleasure and pity, to attract us towards it. Opposite feelings and conditions are thus produced by the excitement of these different opposing emotions, which themselves eventually spring from very different and opposing causes. Many, indeed most, both of the simple and the complex emotions, appear to be not merely seldom exerted simultaneously, but generally opposed to each other. This is constantly seen, not merely in the instances just stated, but with regard to many other of the emotions. Nevertheless, irritation, surprise, suspense, and certain other complex emotions of this class, appear to be in most cases excited, and to act alone and independently; and never, as in the case of those before alluded to, in reference to, or in direct counteraction of some other emotion. And this is, perhaps, the great secret of their power. That which sometimes occasions so violent an outburst of emotion, such as is only now and then witnessed in particular individuals, whether of joy or grief, attachment or aversion, sorrow or mirth; is nothing less than the result of the rushing forth, as it were, unrestrained and uncounteracted by any other, of one of these emotions, or of one or more emotions of the same tendency, alone.

The emotions in general, in regard to the peculiar impulses which they respectively excite in us, have been divided into three principal classes, comprising the impelling emotions, the repelling emotions, and those which are simply motive or agitative. Emotions of the first class, such as those of pleasure and hope, at once and directly impel and allure to the commission of a particular action, or the pursuit of a particular course. Emotions of the second class, such as pain and fear, immediately and directly repel and deter us from the course proposed. Emotions of the third class, such as irritation and surprise,

simply rouse or excite us at once to exertion, although without pointing out any particular direction for us to take. In the excitement of irritation however, both pain and pleasure, being associated with this emotion, more or less operate; the one impelling us to place ourselves in a new condition, the other repelling us from that in which we are at present existent. Certain emotions, such as pain and pleasure, aversion and attachment, fear and hope, may also be termed counterpart emotions, inasmuch as one of them is hardly complete without, and ever has reference to, the other.

From the circumstance of this mutual counteracting and balancing together of opposite emotions, whereby their influence becomes so greatly modified and subdued, the reason is enabled to acquire that ascendancy over them, and in the general regulation of the conduct, which is essential for the due ordering of our actions as rational and responsible beings. Owing to the voluntary power of control which the mind possesses, it is qualified, to a certain extent, both to repress the emotions, and to direct their course, and in some cases wholly to restrain their excitement. And this power of control over them, which is ordinarily comprehended under the term of self-control, is a most important and, indeed, essential acquirement for every individual; and one which is capable of being extensively enlarged by cultivation and exercise. Therefore, although the emotions, which are the agitations and involuntary excitements of the mind, frequently so affect it as greatly to hinder and interfere with its voluntary and legitimate operations; yet these emotions are on all occasions more or less subject to the mandates of the mind, as the ruling power in the community. The mind has, moreover, in each case, extensive influence as regards the selection of the objects towards which the emotions shall be directed.

Hence, it results that the control possessed by the mind over the emotions is of two kinds. 1. The power, in some cases, to repress altogether the excitement of the emotions; and, in all cases, to restrain their force. 2. The power in most, if not in all, cases—varying, however, in its extent according to circumstances—to direct the application and course of the emotions; and to exercise a choice as to the objects of their excitement. As regards the physical emotions, our general power over them is but very limited; and the more simple is their nature, the more limited is that power. Over the mental emotions, the mind has more influence than over those which are physical; inasmuch as the mental emotions owe their origin, and power, and support, to the operations of the mind. In the case of each of the emotions, the mind has more power to direct than

to repress them. Where our effort to stem the torrent would be utterly vain, we can, in most cases, divert its course.

As has already been remarked in the preceding section, the emotions are, to a large extent, dependent for their own vigour on that of the mind itself. Hence, persons of powerful minds are generally possessed of strong feelings; although, the more vigorous the emotions, the less liable to excitement they are upon every trivial occasion. And if the strength of the emotions depends upon the strength of the mind, then, correspondingly with the vigour of the emotions in each case, is the power of the mind to restrain them; so that the energy of each of these forces is directly counteracted by that of the other.

In considering the subject of the present section, it is, however, always to be borne in mind and taken into account, that the emotions of each description are frequently subject to disorder and derangement of different kinds, either from matters affecting the body, or those affecting the mind; which not only occasion them, in many cases, to act irregularly, but by means of which the proper control over them by the mind is much lessened or destroyed. The originating causes of this disorder or irregularity are twofold. 1. Diseases of or defect in the mind, in one or other of the various modes which will be hereafter defined and pointed out,³ by which it loses the power of controlling the lower impulses, either from want of energy, or from want of ability to direct its actions. 2. Disease of the material frame and its organs, through which erroneous sensations, and erroneous emotions springing from them, are produced, or undue influence is given to certain, or to all, of the emotions or medial excitements; by means of which irregularity they are enabled to resist and overcome the legitimate sway of the higher endowments of our nature. To the production of insanity, which is a condition of anarchy in the economy of man, as rebellion is in that of a state, the causes here considered very largely contribute.⁴

9. *Emotions common to other Organized Beings as well as to Man, and variety of their Character in each.*

Allusion has already been made⁵ to the exhibition of emotion, independent of the material frame, in animal nature; and the

³ *Vide post.*, b. iii. c. vii., s. 10.

⁴ *Vide ante*, *Prel. Diss.*, s. viii. a. 4, p. 159.

⁵ *Vide ante*, s. 2.

existence of such an endowment in them has been both admitted and accounted for. In the present section, I propose to inquire into the extent to which this endowment exists in other beings as well as man, as also in the animal economy, and the mode of its manifestation.

Angels and disembodied spirits are, doubtless, susceptible of emotion as well as man; and it is not at all impossible, nor is it contrary to reason to suppose that even the Almighty Himself may be subject to emotion, particularly to pain and grief, and that in an intense degree, possibly far beyond that of any other being. We learn from the book of His own inspiration, that He is liable to pleasure; and the liability to pain is almost a necessary consequence of liability to its context. Indeed, the Deity alone we may infer to be capable of emotion infinite, and of both feeling and sustaining, alike pain, irritation, and pleasure, to the full. Of both pain and pleasure He is not only susceptible, but of experiencing them to the largest extent; and He alone can do so. Of irritation also, He may be supposed to be more susceptible than any other being. And in the case of this emotion, extreme susceptibility is probably the degree of infinitality to which it extends. Angels and disembodied spirits may be presumed to be capable of emotion of each kind in a far greater degree than is man. No doubt, indeed, our union to a material frame contributes essentially to, and is the main cause of our medial capability, and limitation in power, both as regards Sensation and Emotion.

That animals are endowed with several of the emotions, indeed with the whole of those that are simple, both mental and corporeal, and to as full an extent as is the case with man, will readily be admitted.⁶ With certain of the complex emotions they are also endowed:⁷ but as they are gifted with instinctive powers only, and not with any reasonable faculties which might enable them to argue respecting the moral excellence or propriety of any subject, or to carry on abstruse mental operations respecting any circumstance, or the action of any being; they are necessarily wanting in emotions where such operations would be required to constitute them, as, for instance, the complex mental emotions of curiosity and admiration. They are, however, endowed with memory; and hence the recollection of events connected with any object, may contribute to create

⁶ *Aristotle*, however, denies to animals the capability of being happy, because they are not able to exercise contemplation.—*Eth.* c. 8.

⁷ *Mr. Darwin* asserts that "most of the complex emotions are common to the higher animals and ourselves."—*Descent of Man, &c.*, vol. i. p. 41. He also states that animals exhibit emulation, wonder, and curiosity.—*Ibid.* p. 42.

complex emotions of a less intellectual character, such as those of attachment and aversion, fear and hope. The lower and less perfectly organized animals appear to be more susceptible of pain than of pleasure. This may have been so ordered, because the former is more serviceable to guide and stimulate them in their career, than is the latter.

Of the emotion of irritation, animals seem to be in all respects as susceptible as is man;⁸ and that not only as regards its excitement in the material frame, but its origination in their instinctive beings also, which are ever liable to be thus stimulated to action. The emotion of irritation in them, although, as in the case of man, wholly distinct from anger, which is sometimes known by this term, is nevertheless very often inducive to, and indeed the incipient stage of it. Of surprise also animals are as susceptible as is man; although, in their case, this is probably confined to those instances where this emotion is produced by some circumstance which appeals directly to the senses, and does not extend to cases where it arises from the occurrence of an event unexpected by the mind, by which man alone is liable to be affected.

Both aversion and attachment appear as strongly to excite and to influence animals as they do man. Hope also they seem to be capable of experiencing.

Every organized being is, probably, endowed with a degree of fear, corresponding with the necessity of this endowment for its protection, and regulated by the peculiar character of its organization and temperament. Fear differs in this respect not only in beings of different species, but in those also of the same species. And, probably, the quality of fear itself differs in the same person as regards the objects which are calculated to excite it. Each individual also varies much at different times as to his susceptibility of being excited by this emotion. With respect to fear, animals seem to have a more acute sense of danger than man has, and their fears appear to be more easily excited. They do not, however, exhibit so great a fear of death, if indeed they have any notion of such an event, or any direct dread of annihilation; but only an intense fear of, and aversion to pain.⁹ It is probably because they have no mental faculties, the operation of which would add to the effect of their emotions, that the fear of animals never becomes so intense as to produce fainting, as in the case of

⁸ Both the late *Dr. Darwin* (*Zoonomia*) and *Tupper* (*Sensation in Vegetables*), attribute irritability to plants.

And *Sir J. E. Smith* suggests that vegetables may be endowed with a certain degree of sensation, "and some consequent share of happiness."
—*Introd. to Botany*, p. 3.

⁹ *Vide ante, Prel. Diss., s. x. a. 4, p. 207.*

man. The nearest approach to this condition, are probably those cases of fascination exercised by certain animals over their prey, through which they may be supposed to be so paralyzed by fear as to be unable to elude the grasp of their destroyers.

Of mirth, all animals appear to be wholly essentially incapable, wanting the mental capacity necessary to create it; although in appearance their joyous gambols and exuberant manifestations of pleasure nearly approach it. Of sorrow, however, they seem to have their full share; but they are probably exempt from the torture of suspense. I have already observed, when discussing the nature of that emotion, that animals do not appear to be excited by curiosity; not being capable of exercising the mental operations necessary to constitute it. With pride, shame, and pity, they seem to be endowed, to a limited extent; but admiration is too intellectual to come within their sphere. It is obvious that they are also excited by jealousy, which is a very complex emotion, made up of certain simple and certain compounded emotions; indeed, some creatures, especially the more intelligent, evince the capacity of being excited by jealousy to a large extent. A susceptibility of being moved by this emotion, implies a considerable amount of intelligence.¹

The emotions of animals are in general obviously much stronger than those of man, and they are also more easily excited. This circumstance is to a certain extent owing to their being neither interfered with, nor restrained by any operations of the mental faculties or moral endowments, which both check and control their operation in man. What I observed with regard to the emotions in man reflecting the general character of the individual in whom they are excited, is especially, and in a more marked and obvious manner, true with regard to their manifestation in animal nature. The emotions, however, differ much in respect to their manifestation in man and animals, and other organized beings endowed with them; which is determined mainly by the nature of the other powers and endowments possessed by the being in question, through which the operation and influence of each emotion is directed and regulated, and restrained, in various modes. In the case of animals, indeed, the influence of their emotions is extensively modified by one of them counteracting and balancing, as it were, the effect of the other, in the manner already referred to; and which is both more requisite and also

¹ *Sir W. Lawrence*, however, remarks that animals "seem entirely destitute of sympathy with each other, indifferent to each other's sufferings or joys, and unmoved by the worst usage or acutest pangs of their fellows." — *Natural History of Man*, s. i. c. 7.

more apparent in the case of animals than it is in man, inasmuch as they have not intellect to guide and govern them as man has. Their instinctive impulses and inclinations seem, indeed, rather to aid than to control their emotions, except so far as they essentially assist in this counteraction.

Animals appear to vary much more from one another than do different men, as regards the manner in which their emotions are excited, and the degree of their vivacity and vigour: and while the same or corresponding causes, which conduce to produce this variety in the one case, conduce to produce it in the other also; the absence of intellectual influence in the case of animals, leaves a wider scope for the exercise and display of the free influence of the emotions. Moreover, as regards animals, the influence in this respect of their particular organization is at once visible; while that of peculiarity and variety in texture, temperament, and animal fluids, may no less surely be inferred.

It has been asserted by very high authority,² that the experience of happiness is confined to intelligent beings, so that animals cannot partake of it fully, as we do. If this were really the case, a great defect in the economy of nature must at once be admitted. Considering, however, that mundane happiness is entirely medial in its kind, belonging essentially to that part of our constitution which we possess in common with the animal creation; it may surely be inferred that animals are equally capable with man of experiencing this condition, and that they may participate in it as amply as man does. The only real difference between man and animals here, exists not with regard to their experience of happiness, but with respect to the causes which produce it. In both man and animals, happiness may arise from the excitement and gratification of the emotions, appetites, passions, or affection; but in man only can it result from the exercise of the intellectual powers. Even here, however, some medial emotion is excited, which is the immediate cause of happiness. Hence happiness, as regards its essential nature, is identical both in man and animals. It differs only as to its original and primary producing cause in each.

Both man and animals are naturally capacitated for the enjoyment of a large share of happiness, the diminution of which is mainly occasioned by a departure from the course ordained by nature. Thus health, which is one great source of animal happiness, and which is but the perfect condition of our material organized frame, is enjoyed the more fully, the nearer any being continues in a state of nature; while, on the other hand, it is much injured and abridged by artificial habits.

² *Archbishop Leighton's Lectures. On Happiness.*

Animals which are happy while in a state of nature, when confined or domesticated are deprived of most of their natural pursuits and pleasures ; and new modes of life, for which they are but ill adapted, are forced upon them. Hence it does not follow, that because a man, or an animal, is not in the actual enjoyment of happiness, he is to be concluded as not capacitated for such a condition. In most of these cases it is not nature which is at fault, but we ourselves have done violence to nature.

CHAPTER III.

APPETITE.

1. *Origin and Nature of the Appetites.*

HAVING inquired into the nature and operation of the various senses, the organs of which reside in the material frame, from which their sensations are conveyed to the soul; and having next proceeded to examine the nature and operation of the different emotions, which originate, some in the body and some in the soul, but are communicated from the one to the other; we next arrive at the consideration of those medial endowments and operations which are ordinarily denominated the appetites, and which are in each case primarily excited in the material frame, in which they have particular and appropriate organs belonging to them, immediately connected with and adapted for their exercise, although these feelings also are indirectly and ultimately communicated or vibrated, as it were, to the soul.

An appetite may be defined to be an agitation or excitement of a painful nature, arising in some part or organ of the body, according to the nature of the particular appetite; and which feeling is accompanied by, or productive of, an impulse to the commission of some specific act, immediately calculated to appease such appetite. Certain peculiar circumstances must exist to cause the appetite to arise; and there must be, also, a consciousness in the mind or instinctive being, which is another element in the constitution of the appetite, that the act towards which the impulse tends is calculated to allay the feeling excited, and the performance of which act is also of itself of a directly pleasurable nature, independent of the relief that it affords.¹ By this excitement of the body, the mind or instinctive being is also directly affected, on account of the intimate union and sympathy between the two.

In the gratification, however, of an appetite, and in the

¹ *Zeno*, however, tells us that the first appetite of a living creature is to preserve itself—*Laert.* But by appetite, he probably means rather impulse, or inclination, or desire, than what I have here denominated appetite.

pursuit of the object aimed at, we are often urged on by some stimulant wholly independent of the exercise of such appetite. Thus, in hunger, the excitement of agreeable sensations in the palate, which is quite independent of satisfying the frame with food; and, in concupiscence, the excitement of agreeable sensations in the sense of feeling, which is quite independent of the act of generation or the desire of procreating children, are what mainly impel persons in many instances to exercise these appetites. Men, indeed, are stimulated to excesses, both in eating and drinking, not from the mere desire to indulge the appetite, but from the gratification which the exercise of the senses affords. Thus, as already remarked, men never eat bread or drink water to excess, although these substances are as capable of appeasing hunger and quenching thirst, as are any other kinds of aliment. But it is of meats and wines of attractive flavours that men partake to excess; because, by these the palate, which is the organ of the sense of taste, is gratified to the full.

Although eating or drinking to excess, not for the sake of satiating the appetite, but on account of the agreeable sensations which particular species of food afford to the organ of taste, may proceed from an impulse very different to that which would urge us to the indulgence of the appetite merely with the object of appeasing hunger; yet, on the other hand, the act is the same, whether the palate or the appetite be the stimulant to this excess. The desire of gratifying the sense of taste often, moreover, excites the appetite itself, and quickens and sharpens it; so that it, in turn, really becomes the impelling agent.

It may be urged, however, in extenuation of those who indulge in the gratification of the palate, that the pleasure which they derive is not one arising merely from the exercise of the appetites, and satiating themselves with food, whether solid or liquid, so as thoroughly to appease the cravings of hunger, but that it essentially consists in pleasurable exciting the sense of taste; and that, in conjunction with the exercise of this sense, as in that of seeing and hearing, a certain amount of intellectual exertion is more or less, in most cases, called forth, so as to redeem the act in question from being wholly gross and animal; in addition to which, much skill and science have been exerted to produce the agreeable and tasteful excitements aimed at, and which are strictly analogous to mental pleasures arising from the exercise of mental taste. In moderation, at any rate, these luxuries may be allowed. It is only in their excess, that they degrade the being who indulges in them. In proceeding to these extremes, however, the gratification of the palate seldom acts as the leading stimulus; but its impulses are superseded either through a craving for the full indulgence of the appetite of hunger, or for the sake of the buoyant

excitement which follows, where the matter imbibed is alcoholic liquid. Hence, it will often be seen that, although men of considerable intellect gratify their taste as epicures, in delicacies, as regards niceties and varieties, both in wine and viands ; yet they are seldom, if ever, actually gluttonous, or indulgers of their appetites only, which is the lot or propensity of men of weak or gross minds, over whom the influences of the body entirely prevail.

An appetite, therefore, consists in a desire originating in the material frame, and the organs existent in it appertaining to such appetite, for connexion with a particular material object. The emotion of irritation is that which primarily stimulates both the appetites, and is the *primum mobile*, or exciting cause of action ; and to appease which, the impulse referred to ever tends. The emotions of pain and pleasure also contribute to the constitution of appetite ; the one repelling us from our present condition of uneasiness caused by its excitement, and the other impelling us, through the prospect of certain pleasure, to arrive both from its gratification and the mode of effecting it. Not only, indeed, do these various emotions contribute to excite the appetites, but there is a reciprocity of feeling between the appetites and these emotions, so that the former also excite the latter. The appetites are, however, so far more powerful than the emotions, that the emotions directly aid them ; and instead of counteracting each other, even opposite emotions, such as pain and pleasure, unite here to impel us in the same course, assisted also by irritation.

The appetites are the first active and direct stimulants to exertion, as regards our operation on external material objects, by which we are influenced. The senses serve to inform us respecting objects around us. The emotions move us to exertion out of apathy. The appetites carry the proceeding one step further, by directing us to an object of our exertion. The appetites are so far correspondent with the senses, that they both originate in the material frame, and have also, existent, in that frame, peculiar organs connected with, and appropriate to their exercise. In this respect, however, they differ generally from the emotions. There is, nevertheless, this essential characteristic of the appetites, which distinguishes them alike from the passions and from affection, that they relate and have reference, entirely and solely, to our own selves, and our own well-being and preservation ; and not, as in the case of the passions and of affection, to the condition or well-being of others.

The appetites, in each case, attract us towards an object ; not, however, for its own sake, or from any emotion of attachment towards it, but solely on account of the relief to the bodily feelings which such object is capable of affording. Indeed, the essential and ultimate end aimed at in the excitement of an

appetite, is the allayment of the uneasiness or irritation which provoked this excitement; while the direct means by which it is to be satisfied, constitutes an immediate object of the appetite.

An appetite is, nevertheless, excited of itself, and arises in the body through its own inherent irritability, springing from some internal want, but without any stimulating external object, although the latter may call forth, or increase the appetite. Sensations and emotions, on the other hand, are excited only by the causes of them acting on the mind. An appetite is, however, as we shall find to be the case with the passions and with affection, always preceded by a sensation, by a perception, and by a decision upon them. In most, if not in all cases, an emotion is also essential, and accompanies the excitement.

There is ever existent this essential difference between the appetites and the emotions, however complex the latter may be; that while the emotions, some or more of them, are of almost incessant occurrence and influence, the appetites are excited only occasionally, and never, like the emotions, by mere sensation, or by an operation of the mind, but solely by some physical cause produced by an action upon the organs of such appetite; and that their influence is confined to acts either directly or indirectly connected with the gratification of the appetite.

The appetites are, ordinarily, denominated by the terms of hunger and concupiscence. Every organized being requires a certain degree of alimentary sustenance at specific intermediate periods, according as that which it had before imbibed is absorbed or consumed, to supply it with nutrition, and indeed to preserve its natural existence; and the continuance of the species, where that is effected by generation,² is dependent on corporeal sexual connexion, by which new creatures may be produced in the ordinary course of propagation provided by Nature, to supply the place of those who, by the same course of nature, have, after a certain period, decayed and died away. It is, therefore, essential that these creatures should be induced, voluntarily and efficiently, to exert themselves to supply these wants; and for this purpose Nature has caused in each animal certain feelings to arise, which strongly excite it to obtain the peculiar nutriment in the manner requisite, and also impel it to the performance of those actions by which the propagation of its species may be attained.

An appetite in the body is nearly analogous to a desire in the soul; and consists in a restless and ceaseless urgent craving after some object, without which the bodily emotions cannot be satisfied. Like a desire, moreover, an appetite has two objects; the one immediate, the other ultimate. Although the appetites

² *Vide ante, Prel. Diss. s. i. a. 3.*

are excited without any immediate object of them being placed before us, yet the presence of such an object, by calling forth emotions auxiliary to the appetites, conduces to quicken them, and to excite certain of the sensations and emotions, which contribute to their constitution. As in the case of hunger, the sight of food both sharpens the appetite, and excites the sensations and emotions of taste, and smell, and pleasure. The presence of a fair object of the opposite sex, would also, in all cases, stimulate, and in many cases originate, the appetite of concupiscence.

2. *Hunger, its Constitution and Operation.*

The first of the appetites which demands our attention as the most frequently excited, and the most essential for our use, is that of hunger; which originates in, or is produced by, an emotion of bodily irritation, accompanied by uneasiness, and frequently also by pain, which arises immediately in those organs of the material frame whose office it is to aid in imbibing food. The whole material frame is, moreover, oppressed by a feeling of lassitude or languor, which extends itself to the soul as well.

The appetite of hunger is excited by the want of, and desire for food, whether the food required be substantial or liquid, the craving for which latter is commonly denominated thirst, but which is of the same nature as the former, although the precise emotions excited in each case may vary. In both hunger and thirst, a corresponding degree of pleasure is produced by the satisfaction of the appetite, not only on account of the relief which it occasions, but also because by its indulgence the senses of feeling, of taste, and of smell, are each pleasurable excited. Hence, the individual is strongly urged, and by several distinct and independent stimulants, to appease this appetite; as, by experience he is conscious both of the cause of his uneasiness, and of the relief and pleasure which the supply of his wants would afford; and thus we have the origin, and perceive the nature of the appetite of hunger. Hunger has, therefore, immediate reference to some external object, with which we not only desire to become connected, but that it should be united to us in a particular and intimate manner, so as to furnish aliment to, and thereby form a part of our material frame.

Different beings are, nevertheless, differently constituted with regard to this appetite, according as their circumstances or their wants render it expedient for them to be variously stimulated by it. Thus, animals feeding on herbs or other inactive matter, whose wants are easily satisfied, and which little exertion is required to procure, although they stand in

need of a constant supply of food, have not those voracious and exciting appetites, and are not so strongly impelled to satisfy them, as are the carnivorous animals whose food is not obtained without much exertion, and occasionally even pain and danger on their part: they therefore require a stronger stimulus to urge them in the pursuit of it, although they are so constituted, through the benign and wise design of Providence, as to endure for a much longer interval the deprivation of it than the former can do, inasmuch as their food is of a nature which they cannot procure regularly and constantly. In like manner, by the same wise ordinance, the camel, which dwells in the sandy deserts of Arabia, and can only at distant and uncertain periods obtain water; is so framed as to be able to contain at once an extraordinary supply of it, which will suffice for a considerable period.

With the feeling of hunger, as it is felt by living creatures in general, one of irritation in the spiritual or instinctive being, corresponding with that arising in the bodily frame, is also frequently excited, especially in carnivorous animals, which are of a more robust, vigorous, and active frame, and temperament, than are those that are herbivorous; and thus the passion of anger, which to a large extent originates in the emotion of irritation, is in some cases called in to aid this appetite. Man being neither a strictly carnivorous nor wholly herbivorous creature, and having reason given him to guide him in the supply of his wants, has the appetite of hunger in greater moderation than carnivorous animals, but appears to be excited more keenly than those whose food is confined to vegetable or inanimate matter; and his appetite is more refined, and varies more according to the choice of his palate, or as his reason directs him in the approval of certain substances, than does that of animals. In each creature, satiety checks too excessive or injurious an indulgence of this appetite, and pain is produced in the body by such abuse. It is observable, moreover, that creatures when in a healthy state, and when they are most fitted to procure food, require it more than when sick and debilitated; and that much sickness and debilitation abolish the necessity for a large quantity of alimentary nourishment.

3. *Concupiscence, its Constitution and Operation.*

The only other appetite, which is that of concupiscence, as in the case of hunger, originates mainly in the emotion of bodily irritation, more especially in the organs adapted for the exercise of the appetite. While, however, in hunger we are mainly stimulated by the pain which repels us from this condition; in concupiscence we are principally impelled by the prospect of

pleasure in the gratification of the appetite, as well as by the appeasement of the irritation, which, in this appetite also extends itself to the soul, or instinctive being.

The irritative nature of this appetite is further evinced by the fact that it is at once so entirely appeased by the gratification of it, that all inclination for further exercise of it forthwith ceases; and the late object of it occasionally becomes, through the satiety which follows, one rather of aversion than of desire. Thus, men who evince an ardent longing for a woman, which really consists in the excitement of the appetite only with regard to her, directly that they have been allowed to satiate their appetite, cease to display any care about the object of it, and forsake her altogether; which is the ordinary course of seducers of women in order to gratify their lust.

Not only is the excitement of appetite fully allayed, and indeed exterminated, by its gratification, but this is the only mode in which its craving can be effectually subdued. In this respect, appetite differs entirely from passion of each kind, irritation to which may be appeased in many ways besides the actual indulgence of it; as by convincing a man that the occasion of the passion is uncalled for, when its excitement forthwith ceases. The reason of this difference in the operation of the two excitements is, that while passion is an act of the mind which is ruled by mental influences; appetite originates in the body, which is mainly and directly acted upon and controlled by corporeal causes, such as those which stimulate the exercise of appetite.

The essence of the appetite of concupiscence, consists in a desire to be closely corporeally united with another being of the same species, but of the opposite sex, so as to enjoy sexual connexion with such being, which is the closest union that can be effected between two material organized frames.³ As the appetite of hunger has immediate reference to an external *object*, the appetite of concupiscence has immediate reference to an external *person*, with whom is desired that intimate corporeal union which is constituted by sexual intercourse. Admiration of certain qualities of an external nature, so as to render it pleasing or agreeable, stimulates an appetite towards such person; while, on the other hand, any external qualities which tend to render such an object displeasing, or disagreeable, or repulsive, have the effect of checking and restraining the excitement of the appetite towards it. Circumstances, however, which create an aversion of a moral or an intellectual kind, do not, necessarily, prevent the excitement of this appetite, although they may serve to quench the passion of love.

There is, moreover, this essential difference in the nature of the

³ According to *Scaliger* sexual enjoyment constitutes a sixth sense.

two appetites, that while hunger relates only to ourselves, concupiscence relates entirely to other persons; and that while hunger is periodically excited, and the neglect to gratify it is attended immediately with intense emotion, and ultimately with so great a disturbance of the organic arrangements as to occasion death; concupiscence is only occasionally, and very irregularly excited, and the neglect to gratify it is, in general, productive of no serious consequences. Indeed, in the case of some persons, this appetite is but very moderately exerted; while by many, it is never indulged at all. A man, or an animal, so far as he is individually concerned, might, therefore, exist quite as well without the appetite of concupiscence as with it.

The excitement of concupiscence appears to originate more frequently, and more directly, in the mind or instinctive being, than does that of hunger; and to be more under the control of that being, than is the latter, which originates entirely and solely in the emotions springing from the material frame.

As the principal and leading impelling emotion to the exercise of hunger is that of pain, so, as already stated, the principal and leading emotion stimulating to the exercise of concupiscence, is that of pleasure, which the gratification of the appetite promises to afford; and the exercise of which appetite, as in that of hunger, the being excited by it is either instinctively conscious, or soon learns by experience, procures the only relief for this craving; and the act of which produces, through the sense of feeling, the most pleasurable emotions. The redundant state of the body, which contributes largely to the excitement of the appetite of concupiscence, is both most favourable for the production of vigorous offspring, and is that when the frame of the animal will suffer least by the indulgence of the appetite. The strength of this appetite, which is very great, is necessary to promote its exercise in cases, not uncommon among several animals, where both danger and difficulties oftentimes impede the indulgence of it. This appetite, however, does not require, for the ends for which it was created, that it should be exercised constantly, or periodically, like that of hunger, but only when particular opportunities for indulging it are afforded; and an animal is not capacitated to use it until the bodily frame has attained the vigor and development of mature age. We therefore find that it is only upon the approach of, or when in company with, others of the same species, and of a different sex, that this appetite is very vehemently and actively excited; and in many creatures, only at those particular seasons which are best suited for propagation; and that until the body has reached maturity, or when it is worn down by age, or debilitated by disease, as they have not the capacity, so neither are human beings or animals endowed to any considerable extent with the desire of indulging this appetite: indeed, until the animal has reached maturity, the

sexual organs of the body are not fully developed. Thus, both the most vigorous condition, and the most vigorous age of the frame, are especially ordained as those periods when the important act of propagation shall take place. This is the surest guarantee for providing a healthy and sound offspring, inasmuch as debilitated bodies, which would generate feeble progeny, suffer as regards their power of propagation.⁴ As in the appetite of hunger, we also find satiety to follow when concupiscence has been sufficiently exercised, and disease and pain to ensue on its too great indulgence; circumstances, however, which operate with less force on man than on other animals.

4. *Physical Organization connected with the Appetites.*

The appetites not only originating directly and immediately in the material frame, but having organs in that frame peculiarly and exclusively adapted to their exercise; it necessarily follows that the general character and structure of such frame, in conjunction with certain qualities and properties belonging to it, must necessarily possess an important influence, both as regards the peculiar mode of operation, and the general vigour of each of the appetites.

In every animal, according as the organs adapted for the exercise of appetite are perfect and fully developed, and as the material frame is sound and healthy, so in proportion is the appetite vigorous and active. Among individuals of different sexes, nevertheless, notwithstanding the comparative difference, both in organization and in bodily texture and temperament, the appetites are probably excited with nearly equal vigour, however they may vary as to the particular mode of their operation in the case of each; inasmuch as, although their distinctive organization and constitution differ much, and in many respects, they do not differ as to their capability to

⁴ Some eminent physiologists and naturalists—*Mr. Darwin* among them—have, however, maintained an opinion the opposite to this; and have contended that persons in a debilitated state, consumptive people especially, prove more prolific than those blessed with vigorous frames. Is it not, however, more reasonable to infer that in these cases the excessive procreation of children occasioned the condition of debility, than that the condition of debility occasioned, or contributed to, the procreation of children?

Dr. Richardson has obligingly favoured me with the following note on this point:—

“I am of opinion, from what I have observed, that the power of propagation exists equally in the vigorous and in the debilitated. But the product of the debilitated is feeble, often irregular and uncontrolled in its animal appetites, and often self-destructive in its exercise of the act of procreation.”

exercise appetite, and the uses to which appetite serves in them. Hence in a positive manner the condition and constitution of the mind have but little influence over the appetites; although, as regards its negative power, in restraining and directing them, as we shall presently see, that influence is considerable and important. Indeed, the emotions, in which the appetites originate, are entirely those of a corporeal kind; and are mainly connected with, or excited in, the organ of such appetite. Irritation, moreover, which is one of the most purely corporeal of emotions, is that which is the main stimulant to the appetites; and it excites the appetites, principally, through their organs. Certain also of the senses, are ordinarily exerted both in stimulating and in gratifying the appetites, and contribute largely to strengthen their influence. Thus, in hunger, smell and taste, and also seeing and feeling, each more or less aids to invigorate the appetite. Both sight and feeling, stimulate to the exercise of concupiscence.

The appetites being thus mainly dependent, both for their essence and their energy, on the constitution of the material frame, more especially as regards its texture and temperament, and the nature of its organization; they do not directly conduce to denote the comparative strength, or quality, or character of the soul. Indeed, as the soul is for the most part opposed to the body as regards the impulses of either appetite, and as the appetites belong so entirely to the body; the more vigorous the soul is, the less apparent will be the development and display of the appetites.

Although the excitement produced by the appetites is in each case communicated from the body to the soul, and a feeling corresponding with it, is forthwith raised in the latter; yet, appetite in no case, actually exists in, or appertains to the soul itself, but is peculiarly within the province and department, and is the endowment of, the material being alone. Indeed, appetite of the soul, if such there be, is that, which is properly comprehended under the title of moral desire, the nature of which is inquired into in a subsequent book of this Treatise.⁵ Even as regards the material frame, appetite is exclusively and strictly confined to the particular organ of such appetite.

A question of great interest, but which it appears impossible satisfactorily to solve, and where all that we can do towards determining it is by reasoning as to the probable inferences from what we already know concerning the economy of the Creator in corresponding cases; arises out of the inquiry whether, as the appetites appear to be so essentially connected with physical organization, and to reside so entirely, in the

⁵ *Vide post*, book ii. c. ii. ss. 1, 2.

material frame, they will continue to exist in a future state when the soul is either separated from the body, or united to a spiritualized frame; and when, indeed, it must be surmised that but little, if any occasion or use for the appetites will be found. Our intellectual senses, at least, we may suppose will be much enlarged in that state; and our emotions too, both pleasurable and painful, according as may be our future destiny, will be extensively quickened, and increased in susceptibility. But does it also follow that in a state so different to the present, and when the bodily frame and its organs will be far less gross in their nature than they now are, our appetites shall be preserved to us?

To this, however, it may be replied that even in a separate state, and much more so when united to a body however refined, the soul may be capable of being excited by appetite just so far as in our present state the appetites affect and operate upon the soul as well as the body, and to which they in many instances owe much of their vigour. Thus, in the gratification of the appetite of hunger, which is essentially a gross act, much of the pleasure which we experience is excited in the mind as well as in the body, and is at once communicated by the former to the latter. And if the pleasure derived from the exercise of the appetite, exists in the mind independent of the body now; it may surely exist, and be excited in the mind, equally well when the soul is separate from the body, as when it is united to it, provided there be causes to excite it while in that condition. And we may suppose that the appetites may be then spiritually indulged and gratified, and so far as fully exercised directly in this manner, as they now are through the impulses communicated to the soul from the body.

It may also be urged that if in a future state our souls are joined to actual bodies, which although spiritualized as regards their essence, are nevertheless organized, in these bodies a desire for union one with another may arise; and if this desire arises, then the appetite of concupiscence which springs from this desire, must also exist. To this, however, it might be replied that, although this desire for a union of frames may exist, yet these frames themselves being spiritual, the desire of union itself is spiritual also. And if the desire for union is spiritual, and not material, it resolves itself into a passion, and not into an appetite; with which I shall show that, in a future state, it is probable we shall be endowed. On the other hand, the desire in question, for union, is strictly and entirely corporeal, and not intellectual; which constitutes the essence of an appetite, and wherein it differs from a passion. The question as to concupiscence perhaps ultimately resolves itself into this; are angels and spirits all of one sex, or are they male

and female, as among mankind? If different sexes exist among them, it is but reasonable to infer that all the properties springing from the distinction of sex, among which concupiscential appetite is one of the most marked, exist also.⁶

The grand argument against the existence of appetite in a future state, is the belief that as in that condition we shall require neither aliment to sustain us, nor to continue the species by propagation, these appetites being unnecessary, will then cease to exist. On the other hand, as there are many indirect and independent uses for them, besides those direct and principal ends which they conduce to serve; so far as any moral or mental purposes can be promoted by their continuance, it is reasonable to expect that they will still be possessed, although probably in a very limited manner in proportion to their present mode of indulgence.

On the whole, however, this question, as also that of sex among spiritualized beings, must be deemed to be one of those which, with many others of equally high import and interest, must remain in suspense until that momentous period when the secrets and the destinies of the world will be revealed. Nevertheless, it appears most reasonable to expect that appetite will exist in a future state, just so far only as it now exists in the soul when reflected from the body and the material organs, either during its desire or its gratification; but that no original impulses of it will then be communicated from the frame to which it is united, which, it can hardly be supposed, will be endowed with organs for such a purpose.

5. *Growth and Maturity of the Appetites.*

It is further to be observed of the appetites, which so essentially reside in the material frame, and with the exercise and development of which material organs are connected; that they each, correspondingly and contemporaneously with that frame and its organs, gradually grow and develop themselves, and have their successive periods of infancy, maturity, and decay.

The growth of an appetite indeed, in many respects resembles the growth of a limb; and like the vigour acquired by a limb through exercise, the power of the appetite increases by indulgence. And as the limb, which was at first pliable and feeble, gradually at length attains firmness and vigour; so the appetite, which in youth was gentle and docile, by gratification and in maturity becomes turbulent, and subdues those higher influences by which it was early directed, and by which it ever ought

⁶ Writers of various opinions have held that angels are endowed with appetite. *Vide* p. 336, *post*.

to be ruled. Hence the growth of the appetites is, to a large extent, and necessarily, not only contemporaneous with that of the material frame, but actually identical with it. The appetite of concupiscence indeed, can hardly be said to be in existence, until the material frame has reached comparative maturity; nor are the organs necessary for its exercise, developed until that period. On the other hand, the exercise of the appetite of hunger, being necessary for the preservation of the existence of the creature endowed with it, the organs for such exercise are created fit for use, although not absolutely mature, at its birth. The sense of taste, which operates as an impelling stimulant of a pleasurable nature upon the appetite of hunger, is, however, not mature at an early period, and only becomes completely developed by use.

Hunger is, probably, excited in our frames even before our birth, and while we are only in the foetus state; but we can hardly suppose concupiscence to be then exercised or existent. And the reason of this is the fact, already alluded to, that hunger regards only our own being; while concupiscence, which regards others, cannot be excited while we are in a condition entirely secluded and separated from them.

Hunger is therefore not only the first of the appetites to develop itself during infancy, but probably the first of the physical cravings by which we are excited. Concupiscence, on the other hand, does not develop itself until at a late period of the body's growth; although evidences of its existence, and of its influence, are manifested in early youth, varying in each case with the character, mental and moral as well as physical, of the individual, and in proportion as the organs of this appetite are developed. Both the appetites, however, grow, and increase, and acquire strength, as the body advances to maturity, and possess the greatest energy when the material frame is most vigorous. Indeed, the growth not only of the corporeal organs of the appetite, but of whatever endowments of the material frame either directly or indirectly conduce to its exercise, must more or less essentially aid its own progress and growth. Hence, in all respects, the growth of the appetites, which are so closely connected with, and dependent upon and springing from the body, may be concluded to be exactly coeval and correspondent with its growth. During infancy indeed, both the strength and the weakness of appetite is correspondent with that of the material frame. Thus, a child is feeble as regards his muscular force, and his locomotive power; but vigorous as regards the resources of his frame, and its internal operations. So the appetites, although powerful as soon as they are developed as regards their energy and influence, are nevertheless weak at first with respect to the operations which they produce. Growth in each case, material, medial, moral, and mental, is

very gradual, and wholly imperceptible in a direct manner; but is perceivable mainly by the changes of various kinds which, at successive stages in his career, each particular individual exhibits.'

As a general principle, it may probably be inferred, that the appetites do not by growth so much increase as regards the intensity of the irritation to their excitement, or the pain arising from the omission to gratify them; as they do with regard to the pleasure derived from their appeasement, and the general influence over the conduct which they acquire.

When hunger, by frequent indulgence or encouragement, has become predominant, it is called gluttony; and when concupiscence has become very vigorous and excitable, it is called lasciviousness. In both these cases, however, it is not so much that the appetite itself actually grows and increases, as that its influence over the other endowments in the system waxes more powerful, and they become subdued to it; so that at length it acquires the entire ascendancy in the regulation of the conduct. Indeed, in this respect, appetites depend almost as much upon, and gain strength by being fed, as do the beings themselves in which they reside.

With the decay of the material frame, the appetites become much weaker; not only because the organs of the appetites then lose their vigour and energy, but also because the emotions originating in the body, which contribute to support the appetites, become deadened and subdued. Indeed, towards the decline of life, what remains of the appetites appears to be mainly the faint glimmering of them which has been communicated to the soul; which it still continues habitually to reflect, and to which it refers in its cogitations, although the impulse in the body which communicated it, has long ceased to operate.

6. *Legitimate Objects, Functions, and Influences of the Appetites.*

The nature, constitution, and mode of operation of the appetites, having been now examined, we will next inquire into the design which they are intended and adapted to fulfil. The legitimate use of the appetites may be defined to be the leading us to certain actions in relation to some special objects necessary either for our own well-being, or for the accomplishment of particular purposes connected with our condition. Hence, it is essential that an appetite should be directed to some specific ends, and to these only; and that it should be under the control of the reason, or instinctive endowment, both as regards its direction to those ends, and the extent to which it is exerted. The physical emotions and impulses which originate

and stimulate the appetites, constitute, as it were, their propelling power; but in order to render this force of any avail, it must be systematically and intelligently directed, otherwise it will only drive on to anarchy and to ruin the being impelled by it. Indeed, sin in man may be said, in nearly every case, to originate with the misdirection of appetite; and the irregular indulgence of it will, probably, constitute the leading cause of evil, until by the termination of his career on earth, all terrestrial sin ceases.

One mode in particular in which appetite appears to be indirectly beneficial, both to men and animals, and where its influence is widely experienced, is the way in which it restrains them in their appointed spheres. Thus, the necessity for a constant and regular supply of food has been the leading preventive, both as regards nations of men and also animals, in hindering them from wandering into distant regions where their presence would be pernicious. Intellectual spiritual beings may be adapted, alike by their nature and their pursuits, to exist without the need of any such material renovation, and thus no confines are imposed on the limits of their location. The restriction of appetite to particular alimentary substances only for food, in the case of each particular being so nourished, contributes also extensively to secure from molestation all other substances, whether animate or inanimate, organized or inorganicized, not so required.

The appetites are perverted whenever they are directed to illegitimate objects, such as those for which by nature they are unadapted. This is exhibited whenever an animal attempts to feed on food which is not fitted for its frame; as if a granivorous animal should take to eating flesh, or one of a carnivorous kind to eat grass. Man alone transgresses these limits assigned by nature, and that only partially; but perhaps even this partial transgression of them, is the main cause of many of the physical ailments to which civilized man is liable. Perversion of appetite also occurs whenever sexual intercourse takes place between those of different races, the product of which is either a barren or a monstrous progeny. In the case of man, a perversion of appetite exists whenever it is excited towards an object which is forbidden by the laws of morality. Indeed, this principle may be carried much further, and it may be laid down that by every exercise or indulgence of appetite that is not prompted or stimulated by the ultimate object of such appetite, and which springs from a mere desire to gratify the immediate impulse created by it—when ever food is taken only to gratify the palate, or beyond what is proper for satiety; or whenever concupiscence is exercised only to gratify lust, and not with its sole legitimate object, the procreation of offspring,—the appetites may be strictly and

properly said to be perverted and abused; notwithstanding that the inference may be drawn from hence, that the cases of abuse of the appetites in man, although not in animals, must actually far exceed those of their proper appliance. This reflection, nevertheless, however unpalatable and however discreditable to human nature it may be, militates nothing against the correctness of the doctrine advanced. In the search for truth, we must be content to take matters as we actually discover them, not as we might desire they should be.

It may also be laid down that the appetites are abused, and have become depraved, both when they are directed towards objects to which nature never intended they should be applied, and when their excitement is so vigorous as to overpower the due restraints of reason, and of the other counter-acting influences by which they should be kept in check. Probably the most obvious and the most ordinary case of a person being the slave of his appetites, and of the higher mental and moral influences being subdued to those which are lower and medial, is that of a drunkard; where the appetite of hunger, or rather a branch of it, obtains the entire ascendancy over him, and controls his whole conduct. Possibly, indeed, to eating as well as to drinking, men may be equally a slave; but as indulgence in this branch of the appetite of hunger does not directly produce the same pernicious results, and as its gratification is not attended with the exciting indirect consequences which accompany that of drinking, it fails to occasion the same excesses. To the appetite of concupiscence, some voluptuaries are as complete slaves as others are to that of hunger. In all these cases the result is the same, and the higher influences are subdued to the lower.

Dissatisfaction might perhaps be expressed that, by the economy of our constitution, those lower departments of it which appear to be directly debasing and entirely physical, both as regards their origin and their mode of operation, should be permitted to exercise so large an influence, and even to subdue the more exalted endowments and powers. And it might be urged that it would be sufficient for all the purposes of life, if the appetites were excited only when an object fitted to gratify them was actually present; whereas they can be now stimulated quite independent of that contingency, and often, in consequence, run into the wildest excesses and irregularities.

In reply to this it may be remarked that it is essential for the purposes for which the appetites were formed, that they should be very vigorous in their mode of operation; and, although they sometimes subdue the higher influences to their sway, yet this very resistance to them of those particular influ-

ences, is extremely beneficial to the latter. The choicest gifts are frequently the most ill bestowed, and the most valuable elements in nature, are the most liable to be misapplied, as is peculiarly also the case with the highest endowments of the mind. Some of the most precious chemical ingredients are substances of deadly poison. The appetites are, indeed, like fire and water; which, if once allowed to transgress the proper bounds of their limitation, speedily run into the wildest excesses, and ruthlessly lay waste the property of those to whom, when under due regulation, they were invaluable.

On the whole, indeed, the wondrous care of an all-wise, over-ruling Providence, is strikingly manifested even in this, which is comparatively one of the lowest of His works in the constitution of our medial nature. Animated creatures of all ranks are endowed with these appetites, to urge them, in whatever condition they may be placed, to provide the sustenance essential to their well-being, and to prevent the too extensive decrease, or the extinction of their species. If they had been left to follow only the dictates of reason or instinct, unexcited by these appetites, they might not on many occasions have possessed sufficient energy to provide the necessary aliment; or they might have been deterred by other pursuits from doing so, until the want of it had impaired their constitution and frame, and they would have been less provident than they now are, both in laying up food in store, and in choosing to abide in spots where that which is suitable for them is to be obtained. Or, had they been self-supplied with nutrition, or been each enabled to endure for a very long period without requiring it, as are some particular animals, such as the dormouse and certain shell-fish and polypi, which appear to exist as moral lessons to lead us to contentment with our condition; the same dull, torpid existence would probably have been passed by animals in general, as they would have had nothing to excite them to exertion, instead of that cheerful and buoyant hilarity which now pervades all ranks of animated beings. And even in the case of those animals which are made a prey of by others, activity and energy are promoted by this circumstance among them to a great and most beneficial degree; and the death which they suffer from hostile creatures, is the most speedy, and generally the least dreaded by apprehension of its approach, that they could obtain; far preferable, indeed, if more painful for the moment, to the lingering death which nature had ordained by disease or decay. In thinly populated districts, or from the cautious timidity which to a certain extent prevents the approach of most animals towards each other, were it not for the existence of the appetite of concupiscence, the continuation of the propagation of the species would have been uncertain or irregular. The same providential

care is also displayed in the peculiar direction which is given to the exercise of these appetites, by which that kind of food most appropriate to each animal is that which it is led more particularly to prefer and to feed upon; and, in the sexual connexion with each other, different animals are induced to cohabit only with those of their own species, instead of mixing with other animals assimilated to them, and thus forming a heterogeneous and barren race.

7. *Variety of their Mode of Operation in different Persons.*

The vigour and activity of the appetites, are probably more or less, and to a large extent, directly dependent on the acuteness and strength of the senses, especially of the particular sense connected with each appetite, to which it owes both the original excitement of such appetite, and the sustentation of it in operation when so excited. Both the appetites consequently vary in each person, according to the peculiar individual constitution of his material frame in the mode already stated, and also according to the nature of his spiritual being. As his material frame is vigorous and mature, more especially as regards the organs connected with the exercise of the appetites; in a corresponding and proportional manner will the appetites themselves be energetic and active. On the other hand, according as the mental and moral endowments are extensive, and exercise an influence over the actions, will the vehemence and general character of the appetites themselves be modified. The appetites also serve to reflect the character of the individual in whom they are displayed, mental and moral as well as medial; which they evince not directly from their own force, but indirectly, from the mode in which the other influences in the system operate upon and affect, and are operated upon and affected by, these appetites. The appetites, indeed, differ in different persons, alike as to the degree of energy which they exhibit, and of influence which they exercise; and also as to the particular individual mode in which they are manifested.

Each of the appetites, moreover, operates very differently in, and influences in various ways, the same person; and the same individual may be extensively impelled by one appetite, although but little subjected to the dominion of the other. The causes of this may be both corporeal and mental. The same appetites differ also greatly in the same person at different times, which is mainly owing to the dependence of the appetites upon the material frame, whereby they are subject to all the fluctuations and variations attendant on growth and disease, and consequent changes of texture and temperament. How extensively these latter causes affect the appetites, is further

illustrated by the fact that a change of climate which produces a change in the material texture and temperament, produces, also, a corresponding change in the appetites, which is plainly exhibited in the case of man, and more strongly still in that of animals.

The efficient causes of distinction in different persons as to their appetites, and as regards both the vigour with which they are possessed, and the activity and energy with which they are exerted, correspond to a large extent with the causes of difference in the senses and the emotions, more especially as regards their relative acuteness and vigour. Consequently, the qualities of the body rather than those of the mind, appear mainly to influence and regulate their condition and operation. Indeed, as regards the soul, its qualities are here to be considered in a negative, more than in a positive sense; rather as they conduce to aid it in restraining, than as in any way actually aiding the appetites, inasmuch as in ordinary cases their vigour mainly and essentially consists in the soul's weakness. Where the soul has power to restrain and regulate the appetites, they proportionally decrease in vigour, and in activity. In common with the senses, although in a different mode, physical organization has also considerable influence as regards the vigour and activity of the appetites. As regards their alacrity, the structure of the organs immediately connected with, or relating to the exercise of the particular appetite, is, as already observed, necessarily that by which it is mainly and directly affected.

There is nothing, indeed, throughout the system of human nature, more obvious, or more striking, than the various modes in which different persons are moved by the same appetites; which depends in part on the relative vigour of each of these appetites in various individuals, and in part on the other endowments which any one may possess in common with them. Probably, the principal variety as to the operation of the appetites in different persons, is produced by the various modes to which they respectively resort of satisfying these appetites. But this is because the mind, or instinctive being, is here the directing agent. Thus, one person is induced to acts of violence, another to subtle resources, and another to intellectual efforts, in order to supply the exigency for which his appetite is craving.

In most, if not in all cases, it may, consequently, be inferred, that it is not so much that the appetites themselves vary, inasmuch as they act pretty uniformly and regularly in each person, like the powers of attraction and gravitation in the natural world; but that particular independent influences, consisting of the different medial moral and mental endowments of which man is possessed, are what really, and essentially, and ultimately, tend to produce this variation in their appetites, or rather in the

results which these appetites occasion; correspondingly as the effects of attraction and gravitation are varied by the peculiar position and influence of surrounding objects.

The best and fairest illustration, however, of the different modes in which the appetites influence and direct different beings, is that which is afforded by their operation in the animal creation, where we may observe how extensively those of different species vary when excited by the same appetite; and how differently both hunger and concupiscence operate, for instance, in the lion and in the horse, the eagle and the swan, the caterpillar and the spider; although, in each of these animals, the feeling produced by each appetite is probably precisely the same. The essential cause of this difference must, consequently, be the different endowments, in other respects, which each possesses. Exactly analogous, and, indeed, correspondent with this vast variety, in every conceivable mode, of appetite among the different animals in creation, is the variety as regards their appetites among different persons in the human species; whether we refer to the causes of that difference, the mode of their differing, or the changes which in each case contribute to promote this variety, at different periods in the same being.

8. *Restraint and Discipline of the Appetites.*

The appetites being so naturally prone, unless restrained or directed aright, to lead us astray; the question as to the mode of effecting this restraint, and of the power of reasonable and responsible beings to accomplish this end, becomes one of the most important subjects of inquiry connected with their exercise.

Probably, of all the numerous failings with which poor human nature is beset, a too great weakness of the appetites, except of course in case of disease, is one of the rarest which we ever have to lament. Indeed, the power and influence of appetite are best evinced by the extent to which, when fully exerted, it will subjugate the whole man, setting at defiance, and bringing to naught, alike the dictates of reason, the throes of conscience, the desires of ambition and avarice, and the impulses of fear, and even of affection. A man who is wholly under the dominion of his lust, is ready to incur for merely a few minutes' gratification of his appetite, years of privation, and pain and trouble; and to forfeit the hopes and aspirations of a life, as well as the respect and honour of the world.

Man, indeed, notwithstanding the restraints of reason, indulges his appetites more extensively than do the brutes. Although compelled by the wants of nature to use clothes,

which conceal what is most exciting to concupiscential desire, he is, nevertheless, frequently found to be a more abject slave than they are to this feeling. And the appetite of hunger, he seeks by the appliances of reason to render more stimulating, instead of striving to moderate its cravings.

In all cases, however, it is not the too great strength of the appetites which should be the cause of complaint, but the too great weakness of the influences which ever are, or ought to be, antagonistic to appetite, at which we should really repine; more especially as regards those appetites the power and authority of which are mainly dependent on our own discipline and cultivation of them. Nevertheless, when the appetites are exercised in full vigour, and have obtained, by indulgence or otherwise, absolute sway over the higher influences in the system, their force is very great, and almost predominant, if not absolutely irresistible.

As the appetites are mainly dependent for their vigour upon the physical emotions, so it is principally by the mental endowments and powers, that they are restrained and kept in check. Notwithstanding however that the appetites originate in, and owe their impulse to the emotions of the body, and do not primarily or directly spring from the reason, or the operations of the soul; yet even the body while acting under their influence, is nevertheless to a certain extent guided and directed by reason or instinct, in like manner as it is in every action which it performs.

Although in man, as already observed, the appetites are restrained by the reason, and by the other endowments and influences, and ought consequently to be better disciplined than in the case of animals, in the constitution of which they form one of the leading, if not the most influential incitement to action in general; yet, on the other hand, the appetites appear, as already pointed out, in many cases to be more extensively indulged in by man than by animals, and to acquire as much, or even more, ascendancy over his whole conduct. This happens especially in the case of those individuals who are devoted to sensual pleasure, and in whom the nobler delights of the mind are neglected for the pursuit of bodily gratifications; to which the reason itself is moreover made subservient, and its main efforts are directed, not to subdue the body to itself, but slavishly to serve the body. Indeed, one cause of the strength of the appetites in persons of extensive intellectual power is, that those excitements, although originating in the body, are communicated to the mind, operate there, and occasion as great delights to it as to the body. Moreover, as regards man, the mind is also employed to invent new stimulants to the senses. Thus, in the case of food, while animals are content to feed every day on the same kind of

nutriment, and neither desire nor seek after any novelties or rarities, in order to heighten the pleasure which this appetite conveys, in addition to, and beyond the gratification arising from satisfying hunger; man endeavours to add to the gratification of the appetite, the pleasure arising from the indulgence of the senses of taste and smell, and feeling, by selecting food of the choicest kind, rendered additionally palatable by the aid of the culinary art. Variety of every kind as regards this resource, is also supplied in order further to stimulate the appetite. So also with respect to the appetite of concupiscence, which in animals is gratified by the mere ordinary indulgence of it for the appointed purposes of nature; while in man it is not only often abused in the manner already pointed out, but the very abuse itself is actually stimulated by the aid of the mind, which supplies numerous artificial allurements for this purpose. It is only, however, when the mind itself has become debased, and is subdued to the lower influences, that it thus panders to the body and its desires, and lends its aid to accelerate those impulses which it is naturally prone to resist.

We have more power to repress concupiscence, than we have to repress hunger, both because we have more power over the pleasurable emotions, by which concupiscence is strongly stimulated, than we have over those that are painful, which principally originate hunger;—added to which, while pain in this case is actually present, the pleasure is merely prospective:—but also because concupiscence is more frequently aided by the mental powers as regards the attainment of the object of its gratification, than is hunger, over which powers we have more control than over the medial influences, which are mainly exerted in the satisfaction of hunger. In addition to all this, while concupiscence may be quelled by the withdrawal of the object which excited it, hunger can be appeased only by its actual gratification.

Diseases are, in many cases, doubtless intended as direct punishments to us for allowing our appetites to exercise an undue influence over us, and to obtain an unreasonable share of indulgence. Thus, both gluttony, and also excess in the exertion of concupiscence, are directly and effectually punished in this manner, and are among the commonest causes of disease. Probably, indeed, all diseases originate either directly or indirectly from corresponding violations of the laws of nature; and as breach of this duty is the origin of disease in man, so in each man sin is the sure reproducer of disease. Animals, on the other hand, who transgress but seldom the laws of nature in this respect, are but comparatively seldom, and but little subject to these penalties of nature. Among the leading restraints, and most efficient controllers of appetite in man, we must however assuredly rank disease.

But it may be said that it is unreasonable to contend, or to suppose, that the mere indulgence of an appetite is sinful, inasmuch as to that indulgence we are prompted and stimulated by Nature herself; who surely would not have implanted the stimulus in our constitution, if simply obeying her call was of itself directly an act of transgression. To this, however, we may reply, that while the unrestrained and uncontrolled exercise of every appetite leads to sin, yet to each appetite there is supplied a vent, or mode of indulging it, which is both sinless, and a legitimate compliance with the stimulus to which we are urged by Nature. Thus, for the appetite of concupiscence, is provided the vent of conjugal intercourse; for that of hunger, the vent of supplying the body with nutriment sufficient for its renovation. Any departure from, or proceeding beyond this course, is at once both sinful in itself, and a variance from the impulse which Nature has supplied. And it is, moreover, sinful, simply and solely because it is such a variance. Nor does the artificial, unnatural state of society in which man has voluntarily placed himself, afford any valid excuse for acts which are a consequence of that condition.

As man advances in age, and his physical powers and their organs decline and become debilitated, his appetites generally become weaker. But this is not always the case, especially when, by long indulgence, the appetites have been allowed to acquire the entire ascendancy over the conduct, and to bear undisputed sway.

We occasionally read the pathetic narrative of a brave ship, which, after encountering the billows and the storms of the mighty ocean, escaping the rocks of strange shores, and the dangers of foreign foes, is cast away on the coast of our own land, the first view of which had been rapturously hailed; and it is recorded that our own countrymen have been the heartless pillagers of the wreck, whose doom they complacently watched, without using any efforts to avert it. More melancholy still is the spectacle not unfrequently presented to us, of the hoary pilgrim at the termination of his terrestrial career, who, having escaped all the perils of youth, surrenders himself, soul and body, to the dominion of those sensual appetites, against the influence of which his venerable age might be deemed all-sufficient to render him secure.

9. *Different Manner of their Excitement and Action in Man, and other organized Beings.*

In a former section of this chapter,⁷ we surveyed cursorily the various modes in which the appetites operate and exhibit themselves in different members of the animal kingdom; illustrating therefrom, how, in a corresponding manner, those of our own species are excited and influenced by the appetites. I now proceed to inquire further, both into the manner in which other beings besides man, as also different animals, are variously excited by appetite; and, also, into the mode in which animals in general especially differ from man in this respect.

As regards the existence and operation of appetites in other beings, we cannot presume to suppose that the Almighty Himself is gifted with such endowments, as not needing any; having none besides of the same order with whom He could desire union; being able to create at His mere will any number of other beings that He pleases; and never being oppressed by hunger, having all things ready at His will, should He be inclined in any way to resort to alimentary matter. Angels and spirits may possess concupiscential appetite, so far as the desire for union between spiritual substances can exist among them, and in a manner analogous to that in which the excitement of the appetites in the material frame of man is communicated to the soul. But the desire of union in their case appears to be more spiritual than material, and such as constitutes rather the passion of love than the appetite of concupiscence.⁸ Besides, if the appetite of concupiscence is indulged in by them, we must conclude that the procreation of offspring is the object and the result, which is certainly contrary to all that we know and believe about such beings.⁹ And as regards the appetite for food, so far as our knowledge of spiritual beings extends, we might infer that they would be less likely to be impelled, as less likely to have occasion for it, than even by that of concupiscence. It is doubtless, however, remarkable that mention is thrice made in Scripture of angels partaking of material food, such as is common

⁷ *Vide ante*, s. 7. p. 332.

⁸ *Vide post*, c. iv. s. 4.

⁹ Nevertheless, *Norris* concluded that as angels have organized bodies, they are endowed with sexual appetite.—*Letters Philosophical between Norris and Dr. H. More*. The Hindoo notion, which has been adopted by some Christian theologians, is that the sin of the fallen angels consisted in their having carnal intercourse with women, whereby giants were procreated.*—*See the book of Enoch the Prophet*, translated by *Archbishop Lawrence*, p. 5.

* *Gen.* vi. 4.

to man.¹ "Angels' food" is also expressly referred to.² But the expression here is probably strictly and solely metaphorical.³

Plants, like man and animals, are distinguished by different sexes, and propagate their species by seminal communication, and also by emanation,⁴ as well as by generation; and they have organs for imbibing in different modes that nutriment which is essential to their existence.

That, however, which constitutes the leading and essential distinction between the mode of the operation of the appetites in man and in animals, is that in the former they are restrained and regulated by the mental and moral powers and endowments. In the latter, it is mainly by the counteracting influence of opposite emotions that they are so restrained; which also conduces to their restraint and moderation in man, although to a less extent, as the mental and moral powers and endowments are what are mainly resorted to and depended upon for this purpose. In the case of man, however, this counteraction aids the influence of those higher endowments; or rather prepares the way for their operation, by subduing the lower impulses to their rule.

The appetites are, in many respects, more powerful in animals than they are in man,⁵ inasmuch as, correspondingly with the emotions, they are essential for the preservation of the animal, and are what mainly conduce to the continuance and conservation of the species. They are not only the main stimulants to the most important of their actions, but their chief guides and directors also in the principal efforts which they undertake. Very often, indeed, the lower is the instinctive development of the animal, the more powerful are its appetites. The great acuteness of the senses, probably, contributes mainly to the power of the appetites in animals;⁶ while, on the other hand, the appetites are not in their case restrained by intellectual operations. In animals, the appetites appear very exactly to correspond with their physical organization; and, as a general rule, they differ from man in a manner nearly corresponding with their difference from him as regards their physical organization connected with the exercise of the appetites. On the other hand, vegetables in general, which are supplied by nature with the necessary aliment, without any exertion on their part, and the propagation of whose species

¹ *Gen.* xviii. 8; xix. 3; *Tobit* vi. 5.

² *Psalms* lxxviii. 25.

³ And yet if angels do partake of food, some special food may be appropriate to them.

⁴ *Vide ante, Prel. Diss.*, s. i. a. 2, p. 9.

⁵ *Buffon* considered that satisfying the appetite was the principal pleasure of animals.—*Nat. Hist., Nature of Animals*.

⁶ According to *Buffon*, whatever in animals relates to their appetites, strongly agitates their interior sense.—*Nat. Hist., Nature of Animals*.

appears to be a periodical and spontaneous act in their growth, seem not to possess any endowment altogether corresponding with that of appetite.⁷ Certain plants have, however, as I have remarked, the power of shooting out their leaves and tendrils in the direction of nutritive substances; and the roots of a tree will diverge towards water, and will run into soil of a congenial nature, while they will avoid stones and innutritious matter. The *Drosera*, which is nourished by animal substance, possesses a power corresponding with that with which carnivorous animals are endowed, of seizing upon living prey, and killing it, when it imbibes the juices of the animal into its fibres. Certain vegetables also possess different sexes, and are impelled to intermix each other's seminal productions for the purpose of propagating the species.

As a general rule, therefore, the appetites are not only more vigorous in animals than they are in man, but they are exercised more directly and more openly; fewer counteracting causes conducing to interfere with their operation, and the higher influences not intervening to prevent their display.

As in different persons and in different creatures, different emotions, according to the particular and individual characteristic susceptibility of such creature, are excited, some being peculiarly liable to pain, others to fear, others to irritation; so the appetites vary according to the character of this susceptibility. Probably, in animals, irritability is what mainly conduces to produce a difference as regards appetite; more especially as, in their case, this emotion is uncontrolled by mental direction.

There is, moreover, this essential, and remarkable difference, as regards the indulgence of the appetites in man and in animals, which has, indeed, already been cursorily adverted to; that while man is ever prone to abuse and to pervert his appetites, animals are but seldom, if ever, naturally disposed to such a course, either as regards taking food for the mere gratification of the palate, or to over-satiety, or the indulgence of concupiscence upon objects not suited for it, or for the mere purpose of gratifying, without being prompted by the ultimate object, of such appetite. Hence, animals, as regards appetite, without reason, act more correctly and more morally than does man, who is endowed with reason, and in whom appetite holds a far lower, and a less important, position than it does in animals.

On the whole, there is probably nothing in which animals so

⁷ *Sir Matthew Hale* appears to attribute to vegetables, not only sensation, but to a certain extent appetite also, when he asserts that "they seem to be carried with a complacency in the propagation of their kinds, as well as brutes; and, therefore, many of them being impeded therein, they germinate again."—*Origination of Mankind*, s. 1, c. ii. p. 46.

differ one from another, and in so great a variety of ways, as they do in the exhibition of their appetites ; or which serves so essentially to characterize them, reflecting, as it were, the general habits and qualities of the particular being in whom they reside. Some animals are much more under the dominion of the appetites than are others ; and some are ruled by one appetite and not by the other. Beasts, birds, and insects, and the different species in each of these creatures, have all of them their individual peculiarities in the exhibition of appetite. Certain others, in whom it is equally vigorous, exhibit and exercise it in very different ways. Possibly, however, to revert to an idea already started in a previous section, all these different creatures, in their various modes of exhibiting the influence of the appetites, serve but to typify the numerous varieties and characters of man in this respect ; in each of whom, although the appetites themselves are precisely the same, yet in the exercise of appetite they are influenced and impelled in every conceivable manner, by the medial, moral, and mental endowments which they possess, the particular acquisitions with which they are gifted, and the peculiar circumstances in life by which they are surrounded.

CHAPTER IV.

PASSION.

1. *Origin and Nature of the Passions.*

As the appetites consist in certain vehement excitements, originating primarily in the material part of our being, extending their influence to, and ultimately impelling the soul as well; so the passions, on the other hand, consist in certain excitements no less powerful, although generally less permanent, originating primarily in the soul, and extending their influence to, and ultimately impelling also the body.¹ The passions are therefore both higher in their nature, as they are also more extensive in their influence, than are the appetites, inasmuch as the being from which they spring is in its nature nobler than is the body; and, as the soul is the originator of all voluntary actions, passion is necessarily more powerful in its influence than are any of the excitements of the material frame.

The passions are complex in their nature, being compounded in part of one or more of certain of the emotions when strongly excited together, and united;² and in part of the conclusion made by the reason, which marks out a certain object as the agent causing the feeling, so called forth, to arise in the mind, and towards which the passion is directed, and with regard to which a desire or wish is also created. It is the connexion of the feelings or emotions thus excited with some specific object towards which they are directed and exerted, that con-

¹ *Zeno* defines a passion to be a preternatural motion of the soul.—*Iaert.*

Passion is defined by *Plato* to be an irrational motion of the soul, arising out of some good or ill. And he observes of the passions, that some are rough, others mild.

Under the head of passions, *Aristotle* classes every emotion, accompanied with pain or pleasure, as love, anger, fear, courage, pity, which are here comprehended under both emotions and passions.—*Ethics*, b. ii. c. 5.

According to *Cicero*, a passion is a commotion of the soul, averse from right reason against nature.—*Tuse. Disp. Quest.* 4.

² *Malebranche* asserts that a sensation of pleasure always attends the passions, and makes them grateful.—*Search after Truth*, b. v. c. 10.

stitutes the very essence of passion.³ By this connexion, the emotion is not only drawn out and extended, and thus invigorated in its nature and power of action, but it becomes absolutely blended with, and united to, the object towards which it is turned.

It is essential for the complete constitution of a passion, that an object of such passion, and a desire concerning it, should be marked out; as, where no such subjects are presented to the mind, not passion itself, but only one or more of the emotions are excited. Thus, in the case of self-injury, or of some accident through inevitable events, vexation only, unmixed with resentment, is called forth; which feeling of vexation is anger incomplete, or wanting an object and a desire of the passion. But it is not, on the other hand, necessary that this object of passion be always definitely determined, as passion may be excited where it is only known that an actual cause or object does exist, although the identity of such object, or the proof of its connexion with the emotions excited, is not absolutely ascertained.

It is also to be observed, that the passions are excited only by some active, potent, or intelligent agent or being, such as a living creature or an individual of our own species, which is capable of affecting us; while the emotions may be called forth by any action or circumstance, as a sensation of the body, or an operation of the mind, or both joined together. The emotions never produce any effects in the mind independent of themselves, or beyond what they are capable of exciting directly. The passions produce, not only the effects caused by those emotions of which they are compounded, but certain other important and powerful results, independent of, and beyond them; and excite in the mind a perturbation or agitation, which is the immediate fruit or effect of, and indeed constitutes, the real essence of a passion. This is peculiar to the passions, and does not result from any of the emotions when excited by themselves. Passion, indeed, often causes the most violent sensations and movements, both of the body and of the mind. Indeed the agitation of the latter is, in such cases, analogous to the contortions of the former. We do not, however, find that the emotions of pain, grief, pleasure, or joy produce any sensations beyond themselves. And even surprise and fear, when not accompanied by one of the passions, which is perhaps however not very frequently the case, do not create a sensation of this description, which is occasioned by the vehemence and force of the passion; and, in calling it forth,

³ *Malebranche* defines the passions to be all the emotions which naturally affect the soul, on occasion of the extraordinary motion of the blood and animal spirits.—*Search after Truth*, tome ii. b. v. c. 1, s. 1.

the emotions whereof it is partly constituted, doubtless aid. Passion is, indeed, but a compounded emotion, invigorated and rendered capable of producing great results by the annexation to it of an immediate object, and a desire with regard to it.

The senses of seeing, hearing, and feeling, and the emotions springing from them, are those which are principally exerted in the formation of the passions. The senses of taste and smelling can rarely, if ever, immediately conduce to their excitement. Anger and terror are of a painful, and love is of a pleasurable nature, springing from those emotions which partake of this character.

The passions, therefore, differ essentially both from the exertion of the senses, and from the action of the appetites, in that they do not originate or arise in the material frame; nor have they organs in that frame appropriate or adapted to their exercise. But, on the other hand, they arise primarily in the soul itself, and are exercised through that being, which however communicates its vibrations to, and ultimately operates upon the material frame.

Passion, so far as it is actually an endowment of, and consists in an effort of the soul, originates in the soul's liability to be affected or excited in a certain way, by certain events. It is not necessary that the passion should be always in active operation, in order to ensure its actual existence; any more than it is essential that the eye should be always actually seeing, in order to our possessing the organ of vision. In either case, the endowment consists, not in the mere exercise of the power, but in the ability to exercise it whenever fitting circumstances call it into action. So is it not only with the passions, but also with the emotions and the appetites.

Irritation, both physical and mental, is the primary cause in exciting, producing, and stimulating passion of each kind. In passion, however, it is not, as in the case of appetite, the allayment of the uneasiness or irritation which provoked its excitement, that is the immediate object aimed at in the operation of passion. On the contrary, the allayment of this feeling is not directly or even indirectly aimed at, but an independent object springing out of it; consisting, in the case of anger, of retaliation upon the producer of the injury. This, indeed, may indirectly and ultimately allay the irritation, by expiating the injury which produced it.

Passion has always reference to some other being, and is never, as is the case with the appetites, confined to our own selves alone, without relation to any one else. Although passion is primarily excited not in the body but in the soul, yet the bodily organs, in the features of the face, exhibit by their expression, the operation of passion far more openly

than they do that of appetite, which originates in the body. The excitement of emotion, both physical and mental, is also in many cases displayed in the countenance; and the mental emotions are as powerful in this respect, as are those which are purely physical.

Some philosophers, under the denomination of passions, include the various emotions, whether of body or soul, together with those excitements which I have here denominated under the former head. But although Aristotle and Locke, two of the greatest writers of this class, have so classified them, yet they both allow, and even point out, a distinction between certain of them, especially those of anger, terror, and love, sufficient of itself to justify the distinction of them which I have here made. I might further appeal to the general sense and feeling of mankind, whether they do not imply under the designation of passion, those powerful and exciting feelings exclusively, which are the subject of this chapter; and whether they would not view the term as inapplicable to those simple and oft-recurring emotions, such as pain and pleasure, and others of so mild a nature as attachment and pity. The passions moreover are sudden and transient, while the emotions are gradual, and frequently of long continuance. The passions are voluntary, so far as regards their growth and rising, although the emotions of which they are compounded are altogether involuntary. We may restrain anger and love, and even terror, but we cannot prevent pain or pleasure.

The passions are of a nature more intellectual, or belong more exclusively to the feelings of the mind, than do the appetites. The former, although in some instances created through an emotion in the material frame, actually originate in the emotions of the mind, or instinctive sensations, and the desire to gratify its impulses; although the passions may be exercised through the instrumentality of the bodily organs, and the sensation itself of passion, is of a purely intellectual kind. The appetites always originate in impulses arising from the feelings of the body, and the corporeal emotions.⁴ Hence purely spiritual beings⁵ might be inferred to be endowed with passions such as exist in man, even if they are supposed to be devoid of appetites, from having no substantial corporeal frame in which they could be excited or indulged.

⁴ According to *Des Cartes*, the passions belong to the body, and are to be imputed to the soul only, as it is united to the body.—*Pass. of Mind*.

⁵ *Des Cartes* considers God to be incorporeal, indivisible, and void of passion.—*Princ. Phil.* p. 1.

2. *Anger, its Constitution, and Operation.*

The passion of anger is constituted and called forth by the vehement contemporaneous excitement of the emotions of pain or grief, and irritation, and also of aversion; and by the operation of the reason, which denotes or marks out some object as the efficient cause of these feelings, or of some injury by which they have been excited, and against which they are therefore directed or impelled. A strong and ardent desire is by these several concomitant operations excited in the mind, to inflict punishment on the object which has occasioned the evil; which feeling will be proportionably intense, as the respective emotions excited are acute or distressing, or the evidence of the agency of the being supposed to cause it, is more or less conclusive.⁶

The object of anger must be some intelligent or active being. The impulse produced by it when very intense, is what we commonly term revenge; which consists, not in a wish to avoid the injury inflicted, but to recompense with punishment the agent causing the evil. In these cases, we desire not only that the person or being who has caused injury to us should suffer injury, but that the injury should occur as a consequence of the wrong done to us, and should proceed from some voluntary act of our own. We seem also to wish that the proportion of injury done to our adversary, should at least be equivalent to the injury done by him to us, both directly and indirectly. Where, however, the injury done to us is unintentional, or without the voluntary consent of the being causing it, all anger against it ceases, or is greatly mitigated by this circumstance. When anger appears to be excited without any external cause, and is not produced by the act of any other being, but arises solely from some internal operation, it is properly merely irritation accompanied by pain which is called forth.

Anger produces an effect upon the soul analogous to that of disease in the mental vision, causing it to see but the one object towards which its attention is directed; and which, although it views it dimly and imperfectly, and as through a haze, appears unduly magnified when so beheld. Although the soul by anger is stimulated to action, yet all its force is impelled to one particular point. The effect of violent passion is like the sway of a despotic usurper, who compels every other influence to submit unhesitatingly to his own arbitrary will.

Anger burns for the time far more fiercely than hatred ever does, which is like a slow fire of red-hot coals, while anger

⁶ *Aristotle* defines anger to be an emotion accompanied with pain, impelling us to inflict open punishment for any apparent contempt towards ourselves.—*Rhet.* b. ii. c. i.

resembles a raging flame. Hatred is however less limited, and more resolute in its desire of injury to the object of it, than is anger. In anger we desire ourselves to inflict, or to be the cause of, the pain or injury to our adversary. In hatred we are indifferent as to the cause from which our adversary suffers. Anger, moreover, differs from hatred, in that the former is sudden, transient, and active, while the latter is permanent, intense, and stationary. Both induce us to wish evil to the object against which they are directed, while they vary in degree and extent as to this feeling. Anger and hatred united, or concentrated into one excitement, appear therefore, as already remarked, to constitute revenge ; which is the desire, or rather determination, to satiate to the full the irritation producing the passion. Hatred towards an object often arises from smouldering anger, which has no opportunity of bursting forth and venting itself, and so grows into hatred ; like fire internally repressed, which acquires strength by concentrating its force.

Of the different passions, anger is the first which is excited, probably even before that of terror. As it is constituted mainly of the emotions of pain and grief, and does not require any complex operation of the soul upon the material organs for its development, it displays itself very early, frequently during infancy, with considerable vehemence, if suitable causes directly contribute to its being called forth during such a period, although the object against which it is directed may appear uncertain. It is also, of the different passions, that which is at once the most frequently excited, and which has the greatest influence in the production of action as its consequence. The most violent effects in the material frame are constantly produced by it, but mainly and directly by the action upon this frame of the soul. Anger however assumes various phases, according to the extent to which it is excited, the objects which provoke it, and the constitution of the individual in whom it is roused ; different terms are applied to it accordingly. Thus, moderate anger is called displeasure. If it is stronger than this, it is called wrath ; indignation if it is very great ; rage when it is excessive ; and fury when it is excited in the highest degree. Vexation is applied to moderate anger produced by a trifling cause ; resentment to moderate anger occasioned by an important circumstance.

Anger is probably stronger in men than in women, the physical frames of the former, on which the force of this passion is mainly indirectly dependent, being more vigorous in them than in the other sex ; and it differs greatly in different individuals of the same sex, alike as to the facility with which it is excited, and the force of the passion when roused.

The passion of anger is possessed by other beings as well as man. The Almighty is endowed with it to the

full,⁷ as are also, it is probable, spiritual beings, and all those animals that are gifted in any extensive degree with instinctive qualities, although some appear to be excited by it much more powerfully than are others; to a much greater extent, indeed, than is the case with man, whose reason directs him, rather than his passions, when any attack upon him is threatened, or any injury is inflicted. Indeed in these instances, although anger stimulates him to action, yet this action should be in all cases directed, not by passion, but by reason. To animals, on the other hand, anger is very useful to guard them against attack; and in those animals which are comprehended in the carnivorous order, that are often engaged in contests with each other, it is found to be most active and most vehement.

3. *Terror, its Constitution and Operations.*

The passion of terror is produced by the emotion of fear,—which is the leading and essential one in the constitution of this passion—being strongly excited by some apparent and immediate object, through his connexion with which the operation of the reason leads the individual to suppose that great injury, evil, or pain, of some kind or other, is about to befall him, and that the object which is pointed out is the cause of the evil, and towards which the passion is directed. The emotion of irritation is a necessary constituent of this passion; and surprise is also very commonly, although not necessarily, or in every case, an accompaniment to the other emotions contributing to it. There is by nature implanted in the soul an innate dread of separation from the body, which it is also conscious may be caused by any violence that the latter may experience, and which dread is called forth by the passion of terror. This passion is distinct from the emotion of fear, not only as being more powerful than that emotion; but also because when it is excited, an efficient object of it is definitely marked out as its cause, while the limited effects of mere fear, evince it to be altogether different from the passion of terror. Indeed, although the emotion of fear is an important, and in fact an essential element in the constitution of terror; yet it is but an element only of this passion, however vehemently the emotion may be excited. The object producing terror may be any active being or substance whatsoever which is, or appears to be, capable of affecting us injuriously. The desire which it immediately occasions, is a wish to escape the threatened calamity. Hence terror is of all the excitements of the mind the most directly and forcibly repelling. Repulsion is

⁷ *Behmen* however asserts that in God there is no anger; it is mere and clear love.—*Divine Revelation, Quest. 3, 43.*

indeed the only direction in which it urges us, and this it does not only very vigorously, but involuntarily also.

Although terror is equally exciting with anger, it does not so directly conduce to action as does that passion; but in many cases it is directly productive of inaction, occasioning a sort of paralysis, both mental and corporeal. Probably, however, of all the passions, terror is that which occasions the greatest and most visible effects, more especially in the material system. This is owing to the suddenness with which it is generally excited, when not only the opposing emotions, and other counteracting influences, but also the mental powers, are the least prepared to resist its impulses. As a general rule, moreover, it may be considered that repelling causes are ordinarily more influential than those which are attractive (although the impulses produced by pain may be less powerful than those produced by pleasure⁸); in consequence of which the passion of terror may be inferred to derive considerable force as regards the result of its operations. Although it is a purely mental excitement, the strongest effects are produced by terror upon the body; the whole frame is disordered and affected, and in some cases extraordinary changes, even in the texture of the material frame, have been produced by the operation of this passion: the hair of the head has suddenly turned grey, and the action of the organs has in a short period become so disarranged that the mental faculties have for ever lost their regular use of them. Of all the passions, terror is that over which the least control is possessed by the reason. This is in a great measure owing to the frequent abruptness of its approach, when the mind is unprepared to resist it, as the emotion of surprise generally constitutes one of the principal ingredients of this passion. It is also the shortest in its duration of any of the passions. Its main use is to lead living beings both to shun the approach of danger, and to flee from it when present.

Terror is, probably, in general more easily excited, if not actually more powerful when called forth, in the female sex than in the male; which is mainly owing to the physical frame of the former being less adapted to resist aggression than is that of the latter, and fear consequently operating more influentially. As in the case of anger, and from the same cause, different persons of the same sex differ not merely as to their liability to its excitement, but also as regards its influence over them when excited.

The Almighty is, probably, the only being who is not subject to terror: having all things and events at His command, He has nothing to apprehend from any being or event whatsoever. Angels and spirits are endowed with this passion, as are all

⁸ *Vide ante*, chap. ii. s. 4, p. 288.

organized beings gifted with any degree of intelligence. It is consequently common to animals as well as to man, although in a less degree; and, as also in the case of anger, they are only liable to be excited by it when the object causing it is placed immediately in their way. Being unable to carry on the process of reasoning, no operations of the mind in their case can add to the effect and power of the passion of terror, as we see with regard to man.

That peculiar condition of the soul or instinctive being termed fascination, which, although common to animals, or to certain species of them, may not be the lot of man, is the result of such an amount of terror operating upon the creature so affected, as to paralyze the instinctive directing power, so as to deprive it of all capacity of action or exertion in any way; and thus to compel it to become a passive and unresisting prey to the agent exercising such fascination over it.

4. *Love, its Constitution and Operation.*

As anger urges the being excited by it both to shun connexion with, and to desire the injury or destruction of the object of it; and as terror tends directly to repel him from the object of the passion; so love is so far the opposite or context of both these passions, as to lead alike to the desire for connexion with, and for the welfare of, the object of it. And as friendship is the act of the communion together of two souls, and tends to draw them into one; and as concupiscence is the desire for one material frame to be joined to another; so love is the desire of one soul to be blended with, and to be closely united to another, which is often accelerated and impelled by the bodily desire or appetite of the same nature. Love, therefore, results from, and indeed consists in, an attraction of the soul towards some intelligent object with which it desires to be united, from an admiration of, or sympathy with, its qualities. Any circumstance, consequently, which creates a loathing or aversion towards the object of an intellectual or moral kind, tends to retard the excitement of this passion. It is not improbable, indeed, that the ceremony of clasping one another by the hand, by way of salutation, was originally intended to be emblematical of the desire for union which love stimulates between two persons.

Some writers, among them the able and learned Mr. Norris,⁹ confound love, and concupiscence, and benevolence together, as

⁹ *Theory and Regulation of Love.* 1688.

each merely consisting of love of a different kind.¹ From the definitions which I have propounded of them, it will however appear that they are each essentially different from the other, alike as regards their constitution, nature, and operation; concupiscence being an appetite, while benevolence is a moral quality, and love a passion.²

That there is, moreover, no necessary or natural connexion between love and concupiscence, is further evidenced by the fact that for many of those towards whom persons entertain the strongest feelings of love, they have no concupiscential desire; while towards some for whom they entertain a strong concupiscential desire, there is no excitement of love.

Love is, indeed, to the appetite of concupiscence, what taste is to the appetite of hunger. Although neither are actually essential to the excitement of the appetite, both give a strong stimulus to its exercise. Be that as it may however, the essence of love consists essentially and mainly in the desire of blending together and uniting two souls into one, in a manner closely analogous to that in which concupiscence consists in the desire of the union together of two bodies. Love, nevertheless, would not probably, of itself, incite any one to have sexual connexion with another, although it might heighten the pleasure of that connexion. Love is a desire of spiritual, concupiscence of carnal intercourse. Love may exist towards an individual of very unattractive personal appearance, and concupiscence for one whose disposition and character would never excite love.

As intimate corporeal union, to which we are stimulated by the appetite of concupiscence, is productive of the most ecstatic of physical pleasures; and as intimate spiritual union with another intellectual being, to which we are stimulated by the passion of love, is productive of the most ecstatic of mental delights; so it is not improbable that a large share of the happiness of heaven may result from the complete accomplishment of this union between intellectual immortal beings. And it may be inferred that the most blissful union of all, will be that of our souls with the Deity Himself.

Moreover, if affection sometimes grows into love, and if affection may be felt as strongly for one of the same, as for an individual of the opposite sex; it appears difficult to suppose that love also may not as well, and equally, be experienced by

¹ *Norris* divides love into three kinds—divine, spiritual, and carnal, or concupiscence—*Theory of Love*; which latter I have in this work* classed as an appetite, not as a passion.

² *Norris* defines love to be “a motion of the soul towards good.”—*Theory of Love*, p. 10.

* *Vide ante*, chap. iii. s. 3.

any person towards another of the same sex. Indeed, as we are more nearly connected with, and consequently capable of a closer union with those of the same, than with those of an opposite sex ; and as love consists in the desire for the closest intimacy of union, it would seem almost to follow that persons of the same sex are more naturally adapted to be the objects of love than are those of the opposite sex.

Like the other passions already described, love is constituted in part of certain emotions, that of attachment being the essential and leading one, which are directed towards an object of it, and irritation stimulating or exciting us to call it forth.³ Love indeed may possibly exist towards two or more objects at the same time, as well as towards one ; but in proportion as the objects of it are multiplied, its force is weakened, like a stream divided into several rivulets. Here, moreover, very different to the case of family affection, each separate object of love is not only a sharer in the passion, but a rival to the other object. They are not brothers, or even friendly partners together, but envious opponents one to another. An object of love must, in all cases, be intelligent and living ; as towards a being without an intelligent soul, there can be no desire for union of soul. Hence, the object of love is most commonly an individual of the opposite sex ; and the effect of the passion is to cause an overwhelming desire to obtain an inseparable union with, or the society of, that object or individual. But although it is necessary that an object which excites love should be intelligent, it is not at all essential that it should either require it, or be capable of doing so. Indeed, this passion is often very ardently excited towards one by whom it is not returned, and frequently towards an object who is even incapable of returning it. All that appears requisite to constitute an object of love, is that it possess an intelligent soul, with which the soul so excited may hope and desire to obtain an union.

In many cases, the vehemence of the passion is much heightened by the accompaniment of the emotion of fear, caused by the consciousness of uncertainty and difficulty in obtaining the wished for object. Here, therefore, as in the other passions, certain of the emotions are strongly excited together in the mind, and united in one complex feeling ; and an object exists in respect to which that feeling is called forth, and also a desire with regard to it is produced. As already observed, this passion has the effect of promoting a permanent union between the different sexes of the human race, or of originating and causing marriage ; and when it is excited purely, and uncontaminated with grosser feelings or appetites, a union promoted by this passion is the most legitimate that can be formed, as it is then founded on

³ *Norris* considers that love has its organ in the heart.

genuine attachment to, and approval of the object chosen, and not merely on fancy, or lustful appetite. Hence it is of real importance to distinguish between the appetite of concupiscence, and the passion of love; and to ascertain by which of these excitements a person's feelings towards one of the opposite sex, with whom he is desirous of being united, are really influenced. The passion alone should be allowed to direct him in such a case; as when he is excited by the appetite only, real esteem and respect may be wanting, and affection and attachment soon decay when the appetite is satisfied. Love indeed, like concupiscence, may be excited by a mere view of the object towards which this passion is felt, on account of the agreeable or pleasing appearance of such object, whether a human face, or the manners and demeanour, and conversation of the individual; inasmuch as whatever is agreeable is necessarily attractive, and whatever is attractive creates a desire for union with it, and in the desire for union originates love. Nor is love so excited, necessarily at all wanting in many of the highest and most essential elements of this passion, inasmuch as the countenance may, and often does, afford a true index to the character of the mind, and by which alone the peculiar adaptation and suitableness of one person for another may be fully determined. Hence, what is termed "love at first sight," when it is not the mere appetite only of concupiscence which is excited, may be in all respects pure and genuine. Indeed it will often prove that the first glance at a person's countenance serves more correctly to inform any one of his character, than the closest observation afterwards, when the judgment is influenced by other circumstances; as by the opinions which he may have heard expressed, or the pleasure he may have derived from the society of such an individual. In some cases, indeed, it will be found that, although from the above circumstances its correctness had been questioned, the original opinion, thus imbibed from the first glance, was the only true and correct one.

There can be no doubt, moreover, that abstractedly considered, the purer the passion of love is found in any individual, the more perfect is its nature. It may however happen that with beings compounded of, and so extensively influenced by matter, as well as spirit, as man is, and so dependent upon and extensively occupied with worldly affairs; this passion may be of too fragile, too refined a quality, to be allowed to exercise its full sway and influence, unless it be modified by the admixture of some grosser excitement. Angels and spiritual beings may be capacitated to live under its dominion; but either it is too frail for man, or man is too gross for it. Like gold, it requires to be mixed with some baser metal, to adapt it for ordinary vulgar use. Thus, although an attachment formed on the impulse of

pure love, may be the most perfect of its kind, and love at first sight may be the most genuine, because the least influenced by other and lower considerations; yet, unless in forming this attachment be also taken into account the considerations of mutual suitableness in disposition, intellectual and moral character, station, habits of life, fortune, and many other circumstances, a union so originated may be productive of discomfort instead of happiness. And it will soon be found that the pure and fickle flame of love, however brightly it burnt at first, is extinguished or smothered, by having all these base and counteracting influences to contend with.

It is also probable that those who marry entirely from love, will be led to expect a great deal more from each other—to deem each other the very perfection of beings—to a much greater extent than those do, who unite from more practical, although possibly less sublime considerations and motives. Hence, from this cause also, disappointment is more apt to occur. A love match is, to a great extent, a match prompted by imagination. When that fails, the passion fails with it; and if the union was founded on passion only, its basis forthwith disappears. Love alone might well direct persons in choosing a companion for a week, but not in selecting a partner for life.

The passion of love may be also excited towards another object besides a being of the opposite sex; as in the case of a devoted love to God, which may contain all the several constituents of this passion; and in some individuals of strong religious feelings, is equally ardent as when excited by any terrestrial object. In general, however, when we talk of love to God, we speak rather of what we ought to, than of what we, or any except very few, actually do feel; and when we speak of love to our neighbour, we mean rather due respect and amiable feeling towards him, than this passion which we call love. There is, indeed, no term so much misused as that of love; for it is applied indiscriminately not only to the emotion of attachment, and to this passion itself, but also to several other feelings or excitements.

Love is, in many respects, more intellectual in its nature than are either of the other passions; depending more extensively and entirely on the operation of the mind than they do, and the intellectual powers being more directly and more variously exerted in its constitution. Not only is the faculty of reason here employed, if not so extensively as in the case of the other passions, but also the capacity of taste, and very often the imaginative capacity as well. The mind—especially the reason—has, in the earlier stages at least of this passion, more control over love than over either anger or terror. This faculty is indeed more efficient and active in controlling than in aiding the operation and adding to the vigour of this passion, which

is however not less vehement or disquieting than that of anger, or less powerful in its operation than that of terror. Nevertheless, the passion of love, although originating entirely in the soul, is of all the passions that which is peculiarly dependent on the condition of the material frame. It is most vigorous when that frame is in maturity, and but weak and little liable to excitement either during childhood or old age. Originating in the operation of the soul upon certain of the material organs, it is not capable of excitement to the full until those organs are fully developed. The material frame is, however, less directly affected by this passion than it is by either of the others, although on the mind its results are both direct and powerful. Its effect on the body is nevertheless rather relaxing than exciting in its nature. While it is the least sudden in its approach and in its operations, it is the most durable by far of all the passions. But even love, if it burns very intensely, is exhausted ere long; or, at any rate, ceases to do more than glimmer. The flame subsides very soon; although, perhaps, the red heat of its embers is more fervent than the flame.

Nevertheless, of all the passions, although so forcible and influential, and comparatively so durable also, love is perhaps the most unreal as regards its foundation, having for its basis very frequently a mere phantasm or image of the brain. It is often, indeed, not the real individual that is adored, but some fancied ideal personage, in whom are supposed to be concentrated all the excellences, and virtues, and endowments, that could adorn our nature; who is, in fact, a very different being from the one in whom these multifarious attributes are very erroneously supposed to reside. When excited by love, not the outward form, but the inward soul, which we cannot see, but can only conjecture concerning its qualities, is that which is idolized. Hence, of all the passions, love is the most subject to illusion. It is, apparently, the most capricious, because it is the most guided by, and the most dependent upon fancy. The poets tell us that love is blind; but philosophy teaches us that it is rather second-sight than blindness, which is its real besetting malady, and which is far more apt to lead us wrong.

Persons are more affected by failing in their object of pursuit in the case of love, than by the loss of it when incited by any other passion. The reason of this is, that while anger and terror repel us from the object, love draws us to it, and strives to make it a part of ourselves. By losing an object of love, we lose that with which we desire to form a connexion. By losing an object of anger or terror, we lose only the opportunity to repel it further from us than it was before. Nevertheless, opposition does not so much invigorate love, as serve to test the amount of power actually possessed by it. As in the case

of gunpowder ignited in the cannon, the resistance to its force is that which generates the enormous concentrated power which this passion puts forth. So any opposition that we encounter in the pursuit of an object of love, at once excites the fear, which is one of the constituents of the passion, and sets in motion those energies which would otherwise lie dormant.

It might however be urged, in reference to what has already been observed on this head, that if the passion of love and the appetite of concupiscence are so different from, and so independent one of another, they may respectively be exercised by the same person, at the same time, in full vigour towards different objects; one being the entire and sole object of his love, another of his lust. The appetite of concupiscence, and the passion of love, are indeed totally distinct, although each contributes to aid the force of the other. It is consequently, very possible for any one to prefer as an object of concupiscence a different person to the chief object of his love. Indeed, although a man may have many objects towards which concupiscence is vehemently excited; it may be doubted whether love could be strongly felt towards more than one object at a time.

Love is the latest developed of all the passions, which is mainly owing to its being more extensively constituted and influenced by the different powers of the mind, than are the other passions. It is, consequently, not fully excited until the mind and its corporeal organs have attained a considerable degree of maturity. The strength of this passion is conclusively proved by the excesses to which it occasionally impels. Although its action is less sudden than that of either anger or terror, it is able to sustain its operation and its influence for a much longer time; and to continue its usurpation over the other powers with more success, and for a more extended period. This passion is indeed so forcible and so overpowering, that it absorbs within its vortex every other excitement of the kind, so as almost to preclude the possibility of more than one object of it being at the same time existent. As regards the appetite of concupiscence, however, the case is widely different. The excitement of this appetite is neither so vehement, nor so permanent, as is that of love. Hence, as already asserted, a man may have several objects of concupiscential desire, but only one of love: three or four mistresses, but only one wife.

The passion of love is, probably, stronger in woman than it is in man; although we may suppose that in the case of each individual, its proportionate strength and general characteristics correspond with his peculiar individual constitution and character.

Whether this passion is possessed by other beings as well as man, is a subject of inquiry, alike interesting and extensive. That the Almighty is endowed with it cannot be doubted. Angels

and disembodied spirits, and intellectual beings generally, are also gifted with it, varying probably as to the extent of their endowment in this respect, in proportion to their possession of the various constituent properties of which it is made up.

God is, moreover, not only endowed with the passion of love, but He alone possesses it in the highest degree, and in absolute fulness, especially towards those beings which, like man, are nearly related to, as emanations originally from Him. And the love of man to God originates in this connexion with Him, and terminates in an ardent desire for spiritual union with Him, which is probably the end and the perfection of all our desires and aspirations of this kind. Angels and spirits are also not only endowed with the passion of love; but in them, as in man, it stimulates to union alike with each other, and with other beings of the same nature with themselves; as also more especially with God, who is the centre of the spiritual system, towards whom all other beings are drawn, and with whom they desire union as their ultimate and their highest condition.

Whether love is possessed by animals generally, or by any species of them, as well as by man, and in a mode corresponding with that in which it is developed in the latter, or in any other mode, may appear to be a question of some doubt, and which there would be great difficulty in deciding. That many animals possess an extraordinary degree of attachment towards each other is most certain; but this passion of love is altogether distinct from the feeling both of affection and of animal attachment. The latter is innate in each created being; is called forth without any of those vehement feelings of excitement in the mind which constitute the passion of love; is exercised without the guide of the reasoning faculty; produces no exhilarating or debilitating effect on the material or the spiritual system; and may be constantly in operation.

This passion is also, as has already been demonstrated, entirely distinct, and varies essentially from the appetite of concupiscence, inasmuch as it resolves itself into a desire to gratify the feelings of the mind. It is a kind of longing to be united to the soul of, and to enjoy unreserved communion with, an individual, arising from an excessive admiration of him; and which may be excited towards one not possessed of great corporeal beauty or personal attractions, but who is loved on account of his or her amiability, or genius, or fascinating powers. On the other hand, the appetite of concupiscence consists in the wish to revel in the sensual enjoyment of the person; and being excited only by a handsome bodily frame, is altogether independent of any intellectual attraction or feeling of attachment.

An effort of the mental powers may, in a certain degree, as already observed, accompany the exercise of the appetites; and the passion of love, and the appetite of concupiscence, very

commonly, although not necessarily or invariably, are excited together. In such case, the appetite is much stimulated by the passion ; as is evinced by the difference of feeling excited by a woman of a beautiful and engaging countenance, and one of dull or plain features, although the person of each may be equal in comeliness. The sensation in the one case will be strong, and fervent, and active ; in the other, gross, and comparatively insipid. The appetite is, indeed, much more capable of being accelerated and heightened by the passion, than the passion is by the appetite, although both are usually excited together, and aid each other. The passion is, however, much less frequently, and less liable to be excited than is the appetite. Comparatively few objects can call forth the former, while the latter may be roused by almost any object capable of gratifying it. The passion of love is therefore totally distinct both from affection and animal attachment, as also from the appetite of concupiscence ; and although affection and concupiscence, when strongly excited, may produce in part the same effects as this passion, especially in animals who possess them both in common with man, yet they will be found, in their constitution, totally varying and distinct from this passion. We may therefore conclude that animals are not endowed with love in any degree, but only with affection or animal attachment ; and with the appetites and certain of the emotions which contribute to constitute this passion. The passion of love, moreover, when considered in all its constituents, is of a more refined and more intellectual nature than any endowment of this description which they are capable of possessing. The nearest resemblance to this passion among animals, is the instance occasionally afforded among birds of one dying of grief for the loss of its mate. It should be observed however, here, that attachment or affection is quite sufficient to occasion this poignant feeling, without the passion of love ; as parents, who are actuated by the former feelings only, have died of grief for the loss of their children, and children for the loss of their parents. Besides, as already observed, the essential characteristics of the passion of love are entirely wanting in animals. Where, however, in any case, one particular passion, or feeling, or endowment, is absent, those allied to it will be proportionately stronger, and in a great measure supply the defect ; as may be also observed with regard to the loss of one of the senses, or deficiency in one of the intellectual capacities.

5. *Causes principally contributing to the Vivacity and Energy of the Passions.*

The passions appear to be dependent for their vivacity and energy, upon several distinct and separate circumstances, which may, however, all be resolved into the two following causes: first, the peculiar nature and constitution of the mind of the individual in whom they are excited; secondly, the peculiar nature and constitution of the material frame of such person.

As regards the minds which are most susceptible of excitement by passion generally, those which are constantly liable to emotion, and to be affected by trivial and petty causes, are the most easily roused. Persons of weak or little minds, fall a ready prey to each passion by which they are assailed; and, on the other hand, nothing more certainly evinces this littleness of mind, than the susceptibility to be moved by such trifling attacks. But those minds which are the most vigorous and the most powerful, and consequently the least liable to be roused to passion by unimportant circumstances, are also the most energetic in the development and operation of passion, when once excited. Hence, men of strong minds are generally also men of strong passions; although, on the other hand, men of strong passions are often men of weak minds. The reason of this, in the former case, is that, the passions forming an actual part of the soul, indeed a portion of its powers, if the one be strong, it would seem to follow, almost as a necessary consequence, that the other must be so too. But, in the latter case, it may happen that the strength of the passions is owing to the weakness of the intellectual and higher powers, by which the passions ought to be restrained. Here, however, it will generally be observed that the passions are not actually energetic or powerful, as in the former case; but are active and influential, merely because they are not kept in restraint. This is more especially to be seen where the bodily constitution is very perfect, and all the organs through which the constituent emotions of either of the passions originate, or are exercised, are in full vigour. Both in the moral and the material world, influences are often reciprocal; and it is frequently difficult to ascertain which, out of two operations, is the cause, and which is the effect. A sound body is sometimes said to be the result of a well-ordered mind, and of an evenness and stability of temper; whereas, the real fact is, that the evenness and stability of temper are mainly caused by the sound condition of the material frame.

Mental and moral discipline produce also very important results as regards the control to which the passions ought ever to

be subject. Nevertheless, how far, and in what particular mode, the passions, and also the appetites and emotions, are affected by the cultivation of the mind, is a point which it appears difficult exactly to ascertain. We may, however, infer that, while the passions become less vigorous, they also grow more acute in consequence of this discipline. What they lose in force, they gain in intensity. While their medial constituents are thereby debilitated, their mental constituents are increased and invigorated. Thus, love is probably as pure and as fervent in an uneducated as in an educated person; and anger is as vehement in the one as in the other. In these two cases they will however differ much as to the mode both of their operation and manifestation; and also as regards the particular causes most calculated to excite them.

Each of the passions appears, moreover, to have a direct, immediate, and special relation to, and connexion with its corresponding constituent emotion; as terror to pain, anger to irritation and also to pain, and love to pleasure.

Nevertheless, the passions, although originating in the impulses of the soul, are at once communicated to the body, and are evinced through the operation of the latter, to such an extent indeed that they are ordinarily mainly regarded as material agitations. The passions therefore depend in part on the body, and in part on the mind. Probably, different passions differ as to the relative degree in which they are swayed by, or dependent upon the contending influences of the system; and it may perhaps be inferred that terror depends mainly on the body, anger equally on both mind and body, and love mainly on the mind. Sometimes, however, instead of the strength of the material frame directly conducing to the strength of the passions, it may happen that the weaker is the material frame in any individual, the stronger will be his passions, as he is then less able to resist the impulses of the soul in which passion originates; although, on the other hand, a vigorous body is, of course, the most capable of affording full vent to whatever impulses or agitations are communicated to it.

The passions are also dependent, alike for the facility with which they are excited, and also for the vigour of their operation, both on the individual constitution, and on the particular condition, of the material frame, more especially as regards its organization, texture, temperament, and fluids. Thus an irritable frame, from whatever cause, is ever liable to the excitement of passion, however slight the occasion. Indeed, the same causes which affect the emotions constituent of passion, must necessarily also to a large, if not to a corresponding extent, affect the passions also. In all these respects, not only do particular persons vary much from each other, but the same per-

sons at different times also vary in an equal degree, more especially as regards texture, temperament, and irritability.

In the excitement of the passions, the senses, in every case, do not directly aid, although indirectly they do as regards the sensations which contribute to the excitement of passion. In many cases, even the emotions do not so much contribute here by their present excitement, as by the remembrance of them which is called forth in the mind regarding what we have lately endured from their impulses. The mental emotions of joy and grief, and of irritation, are those from which the passions mainly and directly, although not solely and entirely spring. The corporeal emotions of pleasure and pain may also produce them, although not so fully calculated to do so. The passions are, however, not so easily excited as are the emotions or the appetites, and may lie dormant for a long period. Indeed, the wear and tear of constantly excited passion, would be too trying for the strongest constitution to endure. A man ceaselessly beset by passion, is like a country constantly ravaged by war, in which all social and civilized institutions are annihilated.

Although the passions have no corporeal organs like the appetites, through which they are exercised, and by which their operations are manifested; yet the various changes which take place in the material frame when passion violently agitates the soul, display the operation of this excitement as fully as though the passions had each of them such organs especially adapted for their exercise. Indeed, to this extent the countenance is in result, if not in reality, the corporeal organ of each of the passions.

Probably, as a general rule, passion is the most vehement in the male, but the most easily roused in the female sex. In both sexes it is most vigorous in mature age, but most excitable during youth.

6. Progress and Development of the Passions.

In the progress of passion, it is more strictly development than growth which really takes place. While growth is ever steady and direct and certain, development is ordinarily eccentric and indirect and varying. The passions are also more irregular and uncertain, and more vigorous and influential in their excitement, than are the appetites, proportionably as the appetites exceed in each of these respects the emotions. The passions, moreover, advance less perceptibly than do the appetites, being dependent, not on the body, but on the soul; although as the latter acquires maturity, or rather as the organs through which it is exercised attain perfection, they are more clearly developed.

Passion in its operation nearly resembles the increase and

advancement of flame in the destruction of an edifice. At first the element rises gently, gaining power at each stage in its progress, and is then easily repressed. When, however, the conflagration has reached its height, it obtains the entire mastery over everything calculated to afford it fuel, and each object around becomes subjected to its fury.

Passion, originating in the soul rather than in the body, is less affected by any difference in age than are the appetites, correspondingly with the case of the emotions springing from the soul. During infancy and early youth, the passions are however more active, although less powerful than in maturity and advanced age. Like shallow rivulets, in the former period they foam, and cast their spray, and create a great agitation; but only when the stream has become wider and deeper, do they acquire any considerable force. The passions appear to be strongest, and to have the most influence during youth and maturity, because at that period the animal spirits are high, and the material frame is more excitable. The reason has, consequently, then less control over the conduct than later in life. Moreover, during middle age, the passions seem more vigorous, because the motives, which should operate to their restraint, are not so influential then as they are in the decline of life, and after we have acquired more experience. But during maturity, the passions themselves are in reality more powerful and more energetic, although less easily excited, than in youth. Nevertheless, as age advances, the medial influences decline in their power, and the mental part of our nature acquires more the ascendancy. On the other hand, by habitual indulgence, the medial influences gain strength with age, and by exercise the passions themselves increase in vigour; while the more extensively they are restrained, the more completely will they be brought into subjection.

The passions having entirely and solely relation to objects which are external, their development is necessarily more or less dependent upon our social position, and the opportunities which are presented for holding intercourse with others. In the case of a solitary person, they must consequently be developed very slowly, and would probably never arrive at maturity; while, in the case of one who is surrounded by other social beings, the passions may be very early developed, each occurrence in relation to any other social being, contributing more or less to the excitement, and consequent gradual development, of one of the passions. Terror is, perhaps, the least dependent upon our relation with other creatures of the same nature with ourselves, and love is the most so. Any being in connexion with us that is an active and a free agent, may contribute to develop the passion of anger.

But although the passions are gradual, and often late in their

development, and although they owe their development more or less to the circumstances which have already been stated; yet both anger and terror are observed in active operation, alike in man and in animals, at an early period in their career, although not so early as the appetite of hunger. Love, depending more than either of the other passions on the operation of certain of the mental powers, is the last which obtains complete development. As love and concupiscence are often excited, and probably intended in the economy of our system to act together; so concupiscence is of all the appetites that which is the last in becoming fully developed.

7. *Legitimate Objects, Functions, and Influence of the Passions.*

As each endowment and capacity in every part of our constitution, has its peculiar and appropriate use; so the legitimate object of the passions is to induce us to certain actions, in relation to certain external beings or objects, which are necessary for our welfare. For this purpose, however, they should be directed, and restricted, to particular ends only; and ought ever to be under the control of the reason, both as regards the objects to which they are directed, and the extent to which they are excited. The passions, although originating in the soul itself, are, in many cases, directly opposed to the dictates of reason, and in others act in disregard of those dictates. Indeed, when any one is entirely carried away by the influence of passion of either kind, he is degraded to the level of an animal, and is no longer a rational being. The ancients denominated anger a short madness; and terror, and love, equally deprive reason of its dominion over our conduct. In each of these cases, however, it may be observed, that the will, and not the reason, is that, which is subjugated by passion. The reason is in reality still active, and still continues to warn us; but the desire, created by the passion, and which is the result of it, carries the will along with it, together with its concomitant inclinations; so that they are each alike merged in, and urged along with, the object of the passion. The excitement of passion, consequently, does not make us blind, but heedless. It does not prevent us from discerning evil from good; but it hinders us from acting with propriety as to our decision in regard to our conduct.

I observed with respect to the appetites, that they were bestowed, and intended, to direct those endowed with them in the pursuit of certain necessities of life, which, if left to the guidance of their intellectual or instinctive capacities only, they might neglect to provide for regularly. In like manner, the passions of anger and terror are given to living creatures as a powerful

stimulus to urge them, independently of these directing capacities, to resist, and to guard against injury, or danger; and love is placed in the breast of man, to rivet him more firmly to an object of permanent attachment than his reason might succeed in doing.

The advantages that each being derives from the possession of these passions, are also enhanced by his consciousness that all others of the species, are, in like manner, endowed with, and liable to be excited by them; which, in certain cases, restrains him from provoking them, and subjecting himself to the effects of their excitement. The passions are oftentimes serviceable to the mind, in rousing it from a state of comparative torpor, and enabling it to shake off drowsiness, or melancholy, with which it has been clogged. Their effect is to vibrate through the soul, and to cause a thorough purgation and purification of the whole spiritual system.⁴ In fact, the passions produce the same results in the mental constitution, as violent exercise or exertion does in the material. They are of use to the mind, corresponding with that which the appetites are to the body, in rousing it to exertions to which it would not otherwise be induced. Thus do we see, how each part of our nature, which at first view might appear to be a defect in our constitution, harmonizes with the rest, and conduces to the well-being of the whole.

The passions, like the appetites, are capable of being turned to the most beneficial purposes, if kept within due bounds, and directed rightly;⁵ but, if suffered to rage uncontrolled, they speedily overwhelm us, and prove destructive. Thus, many beneficial measures have been effected through the influence of the passions urging men on, when the cool deliberations of reason would have failed to move them. Tyrannies have been overthrown, and error and superstition rooted out by this means, which would otherwise have been suffered to remain undisturbed. On the other hand, the experience of each individual cannot fail to inform him, of how many dire catastrophes the outbreak, and uncontrolled fury of the passions, have been the cause.

The passions, indeed, are in the economy of the world of man, what tempests and thunderstorms are in the economy of the material world. They serve to clear the atmosphere, to dispel foul and pestilential vapours, and to extirpate pernicious humours. Even the very indulgence of the appetites, and the giving vent to the fury of the passions, although, for the time it may do violence to, and distort the soul; yet, its ultimate effect is to clear and purge it of those gross desires which

⁴ *Hobbes* asserts that the difference in quickness of mind, is caused by the difference of men's passions.—*Leviathan*, part i. c. 8.

⁵ *Des Cartes* tells us that all the passions are useful, and only become injurious by excess.—*Pass. of Mind*.

degrade and debase it, and which, in certain cases, can only be completely extinguished by their gratification.

It is not, indeed, at all improbable, and I believe that, could we penetrate into the hidden recesses of the machinery of our intellectual and moral constitution, we should discover that both the appetites and the passions are, in reality, and to an eminent degree, serviceable to the soul, and to its highest efforts and powers, in the result which they produce in both purifying and exalting them, by eradicating and burning away, as it were, several of its grosser and baser tendencies and inclinations, and sensual propensities; analogous, perhaps, to the mode in which certain corporeal vessels serve to purify the brain, and the intellectual organs of the body, by draining off the impure and foul matter which clogs the system. Thus, although the desire to gratify the appetites and passions has a degenerating tendency as regards the soul for the time, by subjecting it to them; yet, the opportunity that is afforded through these medial endowments of getting entirely rid of these desires and inclinations, by their gratification, by which means they wholly cease for the time to operate upon, and to affect the soul, must be attended with a highly beneficial result, in thoroughly freeing the soul from these debasing and gross influences. And as the soul in this life is purged by the exercise of the passions, which draw off from it, and extinguish those sensual desires by which it is excited; so, in a corresponding manner, may we infer that the soul's career on earth, joined to a carnal and mortal body, may have the effect of purging and more completely purifying and refining it, and adapting it for a state of perfection hereafter.

Such, nevertheless, is the influence of passion, that the whole character and disposition of the individual appear to be frequently changed by its excitement. Its real result is not, however, so much essentially to alter the natural inclinations, as for the time to subdue to its sway certain endowments and influences, and to prevent them from exercising their proper and accustomed power in the economy of the system. In each case, however, in order that the passions may be beneficial in their operations, it is essential that they should be under the control of the reason, both as regards the objects towards which they are directed, and the extent to which they are suffered to proceed. In this respect they are analogous to steam and gunpowder, whose forces are very great, but the utility of which depends entirely on their application and direction.

It is of the essence and nature of passion, that it should be but limited as to the period of its operation. Like a raging fire, its very intensity prevents it from being of long continuance, and it lives by consuming the fuel which consti-

tutes its support. Consequently, so soon as the latter is exhausted, the former subsides. Indeed, neither passion, nor emotion of any kind, can continue for very long in full vigour; but, the more vehement is their exercise, the more speedy and certain is their termination. And both in man and in animals, where the passions are easily excited, they are not so intense, or so vehement, as they are in those whose passions are moved only by great and important causes. This is true of each of the passions alike. Those who are frightened at every shadow, seldom suffer such extreme terror from adequate causes of it, as those whom such causes alone can excite. Persons of good temper when once roused to anger, are more violent in their passion than those whom every trifle irritates; just as a lion enraged by the thrust of the spear, is more furious than the snappish cur that is ever ready for the attack. Those, too, who are constantly falling in love, are, in reality, much less affected by this passion, than those who have had but one object of their adoration.

Of the various medial endowments with which man is gifted, love is the greatest foe to reason, and the least submissive to its authority. It does more to disturb its rule, than does any other rebel throughout its dominions, and is the least disposed to listen to its advice or remonstrance. Indeed, it but too frequently not only treats the authority of reason with disdain, but openly and avowedly sets it at defiance.

The passions, correspondingly with certain of the emotions which contribute to constitute them, might be classed under those which are attractive and those which are repulsive: the attractive passions being such, the object of which is agreeable, and attracts us, as in the case of love; the repulsive passions being those of anger and terror, which are produced by an object of aversion and repulsion. Each of the passions, nevertheless, as is the case with the appetites, is to a certain extent painful in its operation, and can only be appeased by the attainment of the object at which it is aiming. A person excited by a raging unsatiated passion, is like a ship driven in a storm, in vain endeavouring to find a harbour of refuge. It is not, however, so much the excitement, or operation of the passion, as the inability to satisfy it, which causes grief. Moreover, as much gratification, and even relief, although perhaps not essential or direct pleasure, is derived from the exercise of the passions, as from that of the appetites. And the passions, equally with the appetites, require to be roused and stimulated ere they can be gratified. Without this result, the indulgence of them will no more afford gratification, than appeasement of hunger is produced by administering food to a man who is already satiated. His palate, indeed, may be pleasantly excited, but this is independent of his appetite. So, if injury is attempted which is

not prompted by anger, it is, strictly, rather malice, or cruelty, than genuine passion, which constitutes the act.

Never, indeed, do men exert themselves more strenuously, or develope all the resources of their mind more fully, than in the pursuit of an object which is to gratify an appetite or a passion, even when the accomplishment of the end may lead to their own destruction. Difficulties are, in such cases, willingly encountered, and obstacles are surmounted, to which no hope of gain, no ambitious enterprize, could by possibility have urged them.

It has been remarked by a celebrated author,⁶ although it appears to me very erroneously, that good sense is the effect of the absence of passion. Now, although the presence and predominance of violent passion may blind or pervert good sense, yet the mere absence of passion can never, of itself, produce good sense; which, as I shall endeavour to show in a subsequent chapter,⁷ is a distinct mental power and capacity of itself, and may equally exist whether the passions in any individual are weak or powerful, active or torpid.

We have considered the general cause and ordinary origin of the abuse and perversion of passion, which may be attributed to two main sources, the misdirection, and the over-excitement of passion. In each of these cases, the voice of reason, by which we should be guided, is silenced or overwhelmed. It may happen, indeed, that the influence of this faculty is so completely subjugated that it is compelled to aid, instead of restraining, the violence of the passion. Passion is misdirected or perverted, whenever it is provoked by an inadequate cause, or it is erroneously directed towards an object which is not in reality the exciting cause of it; whenever it is unduly roused in proportion to the occasion of it, or whenever it is excited beyond the proper bounds which nature has prescribed. Passion is also perverted and abused whenever it is directed towards an object which is forbidden by the laws of morality and duty; as where anger is directed against one's own parents, or the Creator Himself, or where love is excited towards the wife of another. On the other hand, to overcome an appetite or a passion, or to restrain it within due bounds, is in reality as meritorious as to eradicate it altogether. And it is, so far, more advantageous, as that, while we escape any ills which it may bring upon us, we preserve it for any useful ends that it may procure.

By some writers, however, the passions have been defined to be diseases of the mind, and have been compared to fevers. But diseases, although possibly essential to the economy of our constitution, imply nevertheless some irregularity in its operation, which they are sent to correct. The passions, on the other

⁶ *Helvetius, De l'Esprit.*

⁷ *Vide post, b. iii. c. iii. s. 2.*

hand, are a necessary part of that constitution, and are, consequently, no more a disease, or deformity, of the soul, than are the hands or the tongue, although they are often the instruments of evil, a disease or deformity of the body. In each case it is the abuse, and not the existence, or proper use of the endowment, that constitutes, or contributes to, disease.

From the neglect duly to curb and restrain, as well as to direct the passions, it is alone that they are liable to become corrupted and debased as regards their nature and inclinations; and thus, what was ordained by our Maker to conduce so powerfully and so essentially to our protection, and our well-being, is made to contribute mainly to our injury and our degeneracy. Like the army of a powerful state, which, while under due discipline, is its strength and its protection, but when suffered to become unruly, and to usurp the functions of government, becomes a source of even greater danger than the enemy which it is raised to oppose; so the passions, when they acquire the ascendancy over us, instead of either benefiting or protecting us, cause us to fall a prey to our own folly and weakness.

Indeed, a person who is subject to the power of a violent passion, or who is brought under the dominion of his craving appetites, is like a man possessed of an unclean spirit, which drives him to and fro against his will, allowing him no repose, urging him to all sorts of extravagances, and tossing and tearing him constantly. From the one, as much as from the other, ought we earnestly to desire for deliverance; and each are alike opposed to, and opposed by, the Divine Spirit, by whom alone can they be either cast out or subdued. While appetite consumes the soul, like a red-hot furnace, passion assails and overpowers it, like a raging flame.

8. *Different Persons variously excited by Passion.*

The different modes in which various persons are liable to be affected, and to be impelled by passion, correspond pretty exactly, if not entirely, with the leading causes that contribute to their excitement by it; all of which, from what has already been observed,⁸ may be resolved into the three following influences:—1. The comparative excitability of such persons, and their consequent liability to be aroused to passion, in the first instance. 2. The comparative vehemence of their passions when so aroused. 3. The comparative power, which the individuals in question respectively possess, of restraining and directing the impulses of passion.

The first of these causes I have shown to depend mainly on the nature and quality of the emotions, both simple and complex, a subject of which I have already endeavoured to dispose

⁸ *Vide ante*, s. 5.

in a previous chapter. The second of these causes, as already evinced, depends in part on the nature and qualities of the particular soul in which they exist, and in part on the nature and quality of the material frame. A vigorous soul, we might infer, would be the most vehemently excited by passion when it was once aroused; although it would be that in which the passions are the least liable to be stimulated, requiring adequate causes to produce such mighty convulsions. On the constitution of the material frame, more especially as regards the perfection of its organization, its texture, and its temperament, particularly so far as these qualities contribute to its vigour; depend also in a great measure, both the liability of the individual to be excited to passion, and the energy with which it acts when aroused. The same person also differs much at different periods in this respect, according to his condition at the time, material, moral, or mental.

As a powerful soul is that which is liable to be most vehemently excited by passion, so is it also, as a counterbalancing endowment, the best adapted to restrain its own perturbations, and more especially those which proceed from the impulses of the body. It is rather, however, to its peculiar constitution and endowments as regards the powers which it possesses, more especially the proportionate extent of the reasoning capacities, than to its own essential qualities, that the soul owes the ability to direct and to restrain the passions which excite it.

Passion consists mainly in an affection of the soul by some agent more powerful than the operation or influence of the particular cause which tends to restrain the soul in its tranquillity; so that such agent is able to excite or disturb it. Different souls are, therefore, very differently endowed as to their liability to be affected by passion generally, and also as to the particular passion by which they are liable to be excited. It is even possible that an individual soul may never be agitated by passion, which might be contended to be the case with the Deity, no agents being powerful enough to disturb the equanimity of His omnipotent Being; and all whose actions and operations are the result, not of passion, but of His own spontaneous will, in the determination to do what is most beneficial for the purposes intended.

With respect to the efficient causes of distinction in the passions of different persons, their relative activity, vehemence, and energy; these causes correspond to a certain extent with the causes of difference in the appetites, although here the qualities of the body, rather than those of the soul, appear to be what principally and primarily conduce to create this difference, inasmuch as appetite originates, as well as acts, in and through the body, rather than through the soul. The soul itself is at once both the real agent in the excitement of passion, and

also the restraining and regulating power by which it is held in check. Physical organization has less direct influence over the passions, as there are no material organs whatever which are immediately concerned or exercised in the operation of passion.

The passions vary in different individuals much more than do the appetites and the emotions, which appear to act pretty uniformly, depending generally rather on external circumstances, such as the supply of food, or the means of gratifying concupiscential desire, than on the condition or quality of the body itself. But the passions differ alike as regards excitability, activity, and strength, in different persons, in an almost infinite variety of modes.

The fury of passion has already been compared to the progress of conflagration. And as different material objects are very differently adapted, according to their individual properties, to resist or feed fire; so different men, according to their respective individual constitutions, medial, moral, and mental, are very differently adapted to resist, or be impelled by the influence of passion.

It may, nevertheless, happen, that by the same individual the different passions may be possessed in very different degrees of force and activity. Thus, one may be peculiarly liable to anger, another to terror, and another to love, although he may not be nearly so susceptible of the other passions. This, however, is no proof that a vigorous and energetic soul is not always endowed with vigorous and energetic passions; but it is a proof only that the passions depend on some other qualities besides vigour and energy, and that different passions owe their force to different qualities of the soul. Thus, anger is probably chiefly dependent, as to its being excited, on the particular pursuits and concerns of the individual to be affected by it; as what is especially provoking to a person in one condition, to another may be a matter of indifference, although they are each equally liable to be moved by anger when it is once aroused. Terror may be dependent upon deficiency in courage and in physical strength, as well as on the corresponding qualities of the soul; and love upon the capacity of taste, and the strength of the emotions allied to this passion.

Probably, love varies more than do the other passions in different persons, according to their temperament and general constitution, medial, moral, and mental, as well as their disposition and character. This passion, moreover, acts upon and influences the operations of the mind; and the operations of the mind reciprocally act upon this passion. The same person will also, at different periods, according as he himself varies, be very differently affected by it, and in several respects; not merely as regards its vehemence, but its mode of operation.

9. *Restraint and Discipline of the Passions.*

Not only, on the one hand, the degree of injury and of danger which may arise from the existence in our constitution of passion, but also, on the other hand, the beneficial results in the economy of our system, which may be derived from this endowment, depend alike and entirely on the power which we possess to control and regulate our passions.⁹ On this single point, moreover, turns the question, whether we rule, or are ruled by, these impulses; whether we are the slaves of passion, or passion aids us in the due regulation of our conduct through life.¹

Passion, although involuntary, alike as to its excitement, and the mode of its operation,—frequently, indeed, arising both contrary to our inclination, and to the opinion formed by reason,—is, nevertheless, to a large extent, and directly, subject to control. In the case of the passions, as in that of the emotions which form the main basis of passion, different influences, and excitements, by being simultaneously called forth, mutually counteract the effect of, and, as it were, counterbalance each other. It is indeed from the impulses of one class or tendency becoming entirely subdued and overcome by those of another class or tendency, that, through the operation of the emotions, and still more so through that of the passions, the mind seems to lose its balance, and therewith all power of self-control and self-government.

The passions, and also the appetites and emotions, in every person whose conduct is duly regulated, are nevertheless ordinarily restrained and ruled by the reason; and hence they are not allowed so entirely to sway their conduct, as we observe to be the case with regard to the course of action followed by the various members of the animal creation. When, however, through the depraved condition of the individual, his lower endowments, his appetites and passions, obtain the mastery over him, their influence being in such a case extended and strengthened, instead of restrained and curbed, by the reason,²

⁹ *Plato* observes, with regard to the passions, that if kept within due bounds, they are necessary and proper to man; but vicious if they exceed. Under passions, however, as I have already pointed out, he classes some feelings, which are here termed emotions, such as grief and pain.

Montesquieu remarks that the less we are able to satisfy our particular passions, the more we abandon ourselves to those of a general nature.—*Spirit of Laws*, b. v. c. ii.

¹ “It is the work of a philosopher to be every day subduing his passions.”
—*Addison*.

² “The judgment, or the perception that causes it, gets new forces from the increase of the passion, and the passion likewise augments proportionably

carry him on to even greater excesses than the same endowments in animals are wont to urge them.³

Hence, as the legitimate exercise of the reason in regard to passion is both to restrain its violence and to direct its impulses; so the proper influence of reason is lost, either when it fails to exert itself at all, so that the passions are let to run loose, unrestrained, and undisguised; or, when no direction is given to the operation of passion, as regards the objects to which it is directed, or the mode in which it should be exerted. This is especially the case, when the reason, instead of restraining and disciplining, is subjugated to the rule of passion, and is compelled to invigorate, in the place of controlling, its excesses.⁴

What is ordinarily termed goodness of temper, consists essentially in the power of the mind to restrain and control the passion of anger; to prevent its too ready excitement, on the one hand, and to direct and check its outbursts, on the other. This depends, in part, on the strength of the mind, more especially of the reason; and, in part, on the weakness of the passion. Material, texture, and temperament, will not be without their influence here; so far, especially, as irritability is dependent upon this circumstance.

Passions, like plants, acquire vigour according to the soil in which they are placed, the climate in which they live, and the care with which they are nurtured. Their growth and progress may be extensively promoted or retarded by the treatment that they receive. Anger and terror, as also love, are greatly invigorated by indulgence, and are thus led to acquire more influence and more power.

The passion of love, as it owes more to the reason for its existence and energy, than does that of anger or terror, so it is more capable in its early stages, when it is yet tender and docile, of being restrained and governed by the reason. It is also slower and more gradual in its growth, and requires, in general, to be excited more directly, than do the other passions; and it is dependent, in a great degree, on the concurrence of the reason for arriving at full vigour. When, however, this passion has attained maturity, and gained the ascendancy in any individual, it is longer in its duration,

as the judgment that produces it is strengthened."—*Malebranche, Search after Truth*, b. v. c. 10.

³ *Cicero* says:—"What madness love is; for of all the perturbations of the mind, nothing is more vehement."—*Tusc. Disp. On Perturb. of the Mind*, s. 35. And he also observes: "Anger, too, when it disturbs the mind, leaves no room to doubt its being madness."—*Ibid.*, p. 36.

⁴ *Malebranche* asserts that "the judgments which follow the passions are false all manner of ways; because such judgments, being only made by the passions, are only grounded upon the perceptions the soul has of objects as relating to her, or rather to her own commotion."—*Search after Truth*, b. v. c. 10.

more difficult of expulsion, and more extensive in its operations and effects, than are either anger or terror.

Although, when a passion has taken entire possession of the soul, it may be impossible directly to check or restrain it; yet the mind may even then be diverted to new objects of passion, which may serve to weaken the force of that particular one at that time predominant. Thus, in the case of anger and terror, new and greater causes of provocation or of affright, may call off the soul to a fresh object of these passions, and draw it off from that towards which it was lately excited. So, also, in the case of love, a new and more attractive object, may serve to excite a new passion towards it, and to extinguish the old one.⁵ A passion of one kind, may also be suppressed by that of another; as violent terror may extinguish the most vehement love, or the latter passion serve to dispel the most indignant throes of anger.

Possibly, however, after all, the real truth is, not that we are able directly to curb or resist the passions themselves, but that we have sufficient self-restraint in some cases to repress their development; or, in others, to give a proper direction to their force. And this is, probably, the utmost to which our power over them extends.

10. *Variety of their Operation in Animals, and in Man.*

Animals, as well as man, are, as has already been observed, endowed with passion; although animals are not endowed with it in precisely the same manner, or to the same extent, that man is, either as regards the particular passions that he possesses, their peculiar liability to excitement, or their power when once aroused.⁶ As regards the passion of anger, many animals appear to be excited by it, and to exhibit and exercise it, in exact proportion to their opportunities of gratifying it. Thus, carnivorous animals are in general easily provoked, while those of an herbivorous kind are, ordinarily, not so apt to be enraged, except in those particular instances, such as the bull and the boar, where they are endowed with ample power to satiate their resentment. Even animals of the same

⁵ "Some think an old love may be driven out by a new one, as one nail drives out another."—*Cicero, Tusc. Disp. On Perturb. of the Mind*, s. 35.

⁶ *Mr. Darwin* considers that "the males of almost all animals have stronger passions than the females." (*Descent of Man, &c.*, vol. i. p. 272.) This statement, however, appears to be open to considerable doubt. Probably different animals differ much in this respect, as they each also differ in regard to particular passions. *Prof. C. J. Plumptre*, who has paid great attention to the habits of animals, informs me that the only exceptions, as far as he knows, to the assertion by *Mr. Darwin*, are "the females of the hawk tribe, which are always larger and (I think) fiercer than the males, and are therefore always preferred for hawking purposes."

species vary in this respect according to their sex. Correspondent with this difference in disposition and endowment in animals, we find the same variety in mankind, as regards both their proneness to be excited by, and to indulge, the passion of anger.

But, although animals are in general obviously endowed with both anger and terror, and in many of them these two passions are as perfectly developed as they are in man, yet it does not appear that love is possessed by them. The appetite of concupiscence is found vigorously existent in most, if not in all animals; but they are most, if not all of them, apparently wholly destitute of the passion of love,⁷ although capable of very strong feelings of attachment both towards others of their own species, and to objects of a different kind. The appetite of concupiscence, they appear however to exhibit towards each animal of the opposite sex, without any distinction or preference as to beauty, or other personal qualities; whereas in man, concupiscence is frequently stimulated in consequence of the

⁷ *Mr. A. R. Wallace, F.R.G.S., in a note which he has very obligingly communicated to me on this passage, remarks:—"It is necessary to define accurately what love here means.* It appears to me that love between the opposite sexes, is essentially a compound of the affection and the passion;† and that this compound often exists in animals."*

Professor De Quatrefages, to whose valuable work "On the Progress of Anthropology," reference has already been made in these pages, especially in regard to animal nature, has done me the honour of allowing me to consult him on certain of the topics embraced by this work, and has supplied me with an interesting note illustrative of the subject here adverted to. After alluding to the difficulties in the way of a satisfactory solution of the question, and which depends, he says, "on the manner in which we regard the differences existing between man and animals;" and referring to what he has already expressed with regard to the subject in his great work; he remarks that "Love in the higher sense of the word cannot exist in animals, inasmuch as they are wanting in religious and moral qualities; but does it exist in those among mankind who regard women merely as instruments of sensual enjoyment? And the love of a Bashaw towards a favourite, does it resemble what an intelligent and honourable man of elevated sentiment feels towards her with whom he desires to be united? I greatly doubt it. There are, then, in my opinion, several kinds of love. Taken in the sense of a marked preference, love certainly exists among animals. A cock has almost always one favourite. I have experienced an instance of attachment between a dog and a bitch, which is really curious. It was in my own neighbourhood among the Cevennes mountains, that the matter occurred. These animals lived in two villages at some distance one from the other, and separated by a mountain. Along with them lived other dogs and other bitches. These they seemed to disregard, and sought one another out so carefully, that almost every night they found the means of meeting, each of the two performing a part of the journey. It ended in their being killed and devoured by the wolves. Their remains were found, those of the one at a short distance from those of the other. These dogs had neither been brought up together, nor been able to make acquaintance, otherwise than by choice."

* *Vide ante*, p. 348.

† *Vide ante*, p. 350.

passion of love being also moved, and accompanying it.⁸ In man, neither the appetite nor the passion are called forth, unless the object of them be especially adapted to excite it. A very ugly or aged woman fails to move the appetite at all. One of a forbidding countenance fails also to stimulate the passion of love, although she may move the appetite of concupiscence. Nevertheless, although the passion, and the appetite lately referred to, are so often excited together, they are, as already pointed out, quite independent of each other, and not unfrequently act separately. Concupiscence in animals depends probably more on the material frame, than it does in man; and in some animals, its being called forth either in or towards them, is regulated entirely by their bodily condition; so that when they are adapted for the exercise of the appetite, every object of the opposite sex at once excites it, and when this is not the case, it is never called forth. This neglect in animals, to exercise any preference as regards the objects of their concupiscence, on account of their personal qualities of the nature described, is wholly owing to, and is a conclusive proof of their being destitute therewith of the passion of love, which in man causes the difference, and supplies the deficiency alluded to.⁹

In animals, the passions are excited mainly, although not entirely, by the physical emotions, and through physical causes; while in man, mental and moral causes are what mainly, though not alone, excite them. The passions generally, in man and in animals, most resemble each other as regards their intensity, when they are vehemently excited; for although the passions in man are

⁸ *Hobbes* indeed appears to regard concupiscence, or lust, and love, as the same; "but the name lust is used where it is condemned; otherwise it is called by the general name love; for the passion is one and the same indefinite desire of different sex, as natural as hunger."—*Human Nature*, c. ix. s. 15. *Sed vide ante*, pp. 348, 349, 356.

⁹ *Mr. Darwin*, however, questions whether "every male bird of the same species equally excites and attracts the female." (*Selection in Relation to Sex*, vol. ii. p. 99.) He also asserts that "stallions are so frequently capricious in their choice, rejecting one mare, and without any apparent cause taking to another, that various artifices have to be habitually used." (*Ibid*, p. 272.) But in both cases the causes of preference may be those connected with concupiscence rather than with love. Has it been shown that beauty in form at all influences their choice, which may depend on the age, health, or general condition of the female?

Nevertheless, as *Mr. Wallace* has been good enough to point out to me in the following note on this passage: "*Mr. Darwin* has supported his views by copious facts and observations. It appears to me useless to state the opposite view, without showing what facts support it." The observation and experience of each person who has paid attention to this subject, must therefore be appealed to to determine the point in his own mind. *Prof. C. J. Plumtre* supplies me with some strong facts confirmatory of *Mr. Darwin's* statement as regards birds; but as regards certain other animals, the facts which I have obtained seem to tell differently.

of themselves stronger than they are in animals,—as the soul of man is far more vigorous than the instinctive animal being;—yet, on the other hand, in man, the passions being checked by the reason, while in animals they have no such restraint, but are controlled only by the operation of opposite emotions or passions, by this means their force is reduced to nearly the same level, both in man and in animals. Nevertheless, in those animals where they are perfectly developed, as in certain of the larger carnivorous animals, the passions are much more fully and vigorously exhibited than they are in man; and are also more powerful, and more influential and energetic in their operation, inasmuch as animals possess no intellectual faculties, or moral endowments, which in man mainly restrain any excesses on the part of the passions. From this cause, both the passions and the appetites in animals, are not only less restricted generally, but are also more free to follow their own natural bent and inclination, without bias or diversion.

It appears however most probable, and absolute certainty here seems to be beyond our reach, that some of the lowest animals in point of instinctive endowment, such as worms, and oysters, and polypi, are wholly destitute of passion of any kind, and possess only sensations, and emotions, and appetites,¹ which suffice for all the exigencies of their career. These creatures are, indeed, little raised above the scale of vegetable creation; and their destitution of passion may be concluded alike from the nature of their constitution, which appears incapable of either the existence or the exercise, of such an endowment; and also from the circumstance that no actual use or necessity in their case for such a property, can be found to exist. In the case of vegetables, there is even less reason to suppose that they possess anything in the shape of passion; nor has any property even analogous to it in their constitution, ever been discovered.

From the passions of animals being unrestrained by any mental or moral endowments, as in the case of man, and being also undirected and unbiassed by these, or any other corresponding influences; the passions in animals serve more clearly and correctly to reflect, as it were, the real nature and disposition, if we may so term it, of the animal, than they do with regard to the character of man. Hence it is that animal nature often affords an insight into human nature, which is not attainable by a direct investigation of man himself. Reflected light, although comparatively dim and powerless, may be occasionally better adapted for the eyes of mortals, than the brilliant effulgence directly emanating from the sun.

¹ *Mr. Wallace*, however, asks here, “What is passion but a compound of these three?”—*Sed vide ante*, p. 340.

CHAPTER V.

AFFECTION, AND ANIMAL ATTACHMENT.

1. *Origin, Nature, and Constitution of this Endowment.*

THE last of the feelings, excitements, or endowments appertaining to the medial constitution of man, are those which I have here denominated affection, and animal, or, as it might in some respects be more aptly designated, inanimate attachment; the former of which essentially consists in, or is constituted by, the settled and energetic attraction of the inclinations or emotions of the being moved by it towards some particular intelligent object with which he is in some way connected, so as to desire the constant presence, as also the welfare of such object. Thus, when towards any creature gifted with intelligence, either intellectual or instinctive, a feeling of attachment arises, especially if this feeling has been produced by the consideration that such creature is in some way connected with, or united to us, by any particular tie; a certain complex feeling or excitement, compounded of the emotions of pleasure, attachment, and, occasionally, pity and sympathy, together with other emotions of the same quality, is produced in the soul or instinctive being, which the operation of the reason or instinct serves both to cement and strengthen, and which excitement constitutes what is ordinarily termed affection, and continues until removed by some disturbing or destructive cause. Mere animal or inanimate attachment, which is exhibited towards an inanimate object,¹ is, however, as I shall point out more particularly in the next section, affection incomplete; and is common to animals as well as to man, being possessed by man, in conjunction with affection.

Affection appears to be more peculiarly within the province of, and is exerted to the fullest extent by man, although common to animals as well.² Animal attachment, on the other

¹ According to *Aristotle*, things inanimate cannot be the objects, not merely of affection, but even of friendship.—*Ethics*, b. viii. c. 2.

² *Cicero* speaks of friendship as “the most valuable of all human possessions, no other being equally suited to the moral nature of man;” and he says that “true friendship can only subsist between those who are animated by the strictest principles of honour and virtue.”—*Lælius*.

hand, seems peculiarly within the province of animals, although man also is extensively influenced by it. Affection is, however, doubtless excited in animals as well as man; but it is so far limited, that reason, which is wanting in them, is essential to perfect it. The same relation that instinct bears to intellect, we may infer that affection in animals bears to affection in man. The object of affection in the case of either, may be any animate intelligent being capable of perceiving and reciprocating this feeling.

It might nevertheless be urged that we occasionally entertain warm feelings of affection for persons who are dead as well as for the living; and that, if so, it cannot be necessary, in order to constitute affection, that the object of it be animate and intelligent. In this case, however, it is not really affection, but the remembrance of it only, which is actually cherished. Affectionate remembrance, indeed, not actual affection itself, is the essential excitement which is experienced.

The consciousness of affinity, and the emotion of sympathy,³ are the originating causes both of affection, and, in certain cases, of animal attachment also, although neither of these sentiments appears to be, or is, directly called forth towards oneself; nor are they ever excited where a being has no connexion with that in which they are produced. Thus, we may regard with indifference, and might be willing to sacrifice nothing, to appease the calamities of entire strangers; while we heartily sympathize with, and would make very great personal sacrifices to alleviate the sufferings of those to whom we are united by the ties of blood, or by feelings of affection.

But although affection is of so high a nature, both as regards its origin in the sublimest emotions of the soul, and the noble actions to which it excites us; yet its basis may, nevertheless, be of the humblest order, and even sordid in its kind. Thus, gratitude for benefits, and even for pecuniary gifts, may serve first to kindle the lowly spark from whence arises the flame that burns eventually with so bright a blaze, and rivals in its glory attributes which are divine.

Affection differs from each of the emotions, as being at once more complex, and more permanent, than are any of them. It springs from the spiritual part of our being, which is not the case with the appetites; and is less vehement in its operation, and less transient in its duration, than are the passions. Affection differs

³ *Dr. Innes* remarks that persons are induced to become attached to each other from one "seeing those qualities in his friend which he loves and values, or beholding his own image fairly stamped upon him."—*Inquiry into the Original of Moral Virtue*, p. 317. And *Cicero* alludes to the "sentiments of secret approbation which arise on the very first interview with a man whose manners and temper seem to harmonize with our own, and in whom we think we observe symptoms of an honest and virtuous mind."—*Lælius*.

from the senses and the appetites, and coincides with the passions, in that it does not originate in the material frame, nor has any organs in that frame appropriate or adapted to its exercise; but, on the other hand, it arises primarily in the soul, or instinctive being, although, unlike the passions in this respect, it confines its operations to that being, and does not seem in any direct or perceptible manner to act upon, or influence the material frame, or any of its organs. Nor does it appear that irritation, which is so important an element in the constitution of appetite and passion of each kind, in any way contributes towards the production of affection. From this circumstance also, arises the transitory condition of appetite and passion, and the permanence of affection; inasmuch as the presence of irritation is destructive of permanency, and irresistibly rouses to action so as to produce an alteration in the condition of the being affected by it. Affection moreover differs from appetite, in that it relates to another being independent of ourselves.

Affection further differs in a marked manner both from appetite and passion, as regards its infinite insatiability with respect to the object of it: for while appetite and passion, not excepting love, are soon gratified and satiated by the attainment of the object desired; affection is never satisfied with this result, and the excitement, instead of wearing out or becoming exhausted, acquires strength by exercise. Another remarkable feature in affection, wherein it also differs in a striking respect from both appetite and passion, is that the absence of the object, so far from extinguishing, operates only as a stimulant to it. In the case of appetite and passion, on the contrary, the presence of the object is the strongest preservative of the desire they produce, while its absence is often productive of its decay.

The most marked and essential distinction, however, between the operation of affection and that of appetite and passion, appears to be this. Appetite impels us towards an object for the sake of gratifying by its means certain organic feelings. Passion (except in the case of love, which is attractive in its tendency) repels us from the object of it, on account of certain operations performed by it which have excited us against it. Affection, on the other hand, impels us towards an object, not with the mere hope of some gratification arising out of this source, but from the desire of a permanent connexion with such object on account of our attachment to it.⁴

Affection is, nevertheless, so far correspondent with certain

⁴ *Dr. Abercrombie* defines affection to be "an original feeling or emotion existing in ourselves, which leads us to a particular conduct towards other men, without reference to any principle except the intuitive impulse of the emotion itself."—*On the Moral Feelings*, s. 2.

of the emotions that, like them, it appears to have occasionally its counterpart excitement. Thus, although the warmth of affection between relatives is the strongest, yet, on the other hand, the hate that is occasionally excited between persons so bound together, is also proportionably vigorous. In each case, the consciousness of the tie contributes to form a fulcrum on which the force of the feeling rests.

Love gratified, soon subsides into affection—as in the case of the affection subsisting between husbands and wives; but it does not appear that affection often rises into love. Love is, ordinarily, kindled by a new object; while affection seldom or never fixes itself except on an object to which we have been long accustomed, and whose actions in regard to ourselves have called it forth. Therefore, although affection often follows, it but seldom precedes love. There is, moreover, this essential distinction between the excitement of affection and that of the passion of love: that while love is limited in its direction to one object at a time, or, at any rate, can be efficiently and vigorously exerted towards only one object; affection may be exerted towards several objects at once, and suffers but little as regards its intensity from being so diversified.

Affection towards offspring, which is the most vehement and intense of all the excitements of the soul, does not certainly originate in any hope or calculation of self-interest; but, on the contrary, is often exercised at a great sacrifice of our own immediate well-being, as well as of our comfort, in opposition, moreover, to the dictates and influence of emotion, appetite, and passion. It may, perhaps, however be said that affection for offspring is in reality a kind of self-love; inasmuch as we are attached to our own children as a part of ourselves,* while concerning those with whom we are wholly unconnected, we are quite indifferent.

An illustration, and indeed a sure proof that affection in many cases springs entirely from feeling regarding self, is the circumstance that it is not unfrequently exercised even towards our children, really for the sake, not so much of benefiting them, as of gratifying ourselves. In many instances, indeed, the former object is too apt to be sacrificed to the latter. There is also this essential difference between gratitude, love, and affection. Gratitude is a feeling of benevolence, called forth towards an individual on account of some beneficent act performed by him on behalf of the person in whom this feeling is excited. Love, as has been

* Aristotle observes that "parents love their children as parts of themselves, and children love their parents as the source from which they spring." *Ethics*, b. viii. c. 12. Also, that the love of parents for their children is merely an expression of self-love. *Ibid.*

shown, is a passion constituted mainly of an ardent desire for union with an individual, on account of some very excellent, or admirable, or congenial qualities, which such person possesses. But affection originates in a consciousness of intimate connexion with the being towards whom this feeling is excited, and a consequent desire to aid and protect him, as a part of ourselves.

Affection appears ordinarily to originate in two causes, and to be of two different kinds:—1, in a feeling of actual connexion between the object of affection and ourselves, in which consists natural affection; and 2, in a feeling of affection for some intelligent object with which we have been long intimately associated, owing to its having become a source of pleasure or gratification to ourselves, in which consists acquired affection. The two feelings are, however, commonly united together, and are experienced as one, although different in their origin. Thus, both in the human race and among animals, a feeling for its offspring is generated in the mind or instinctive being of the parent, from considering it as a part of, and as derived immediately from itself, and it is accordingly nourished as such; and nature, in order to enforce this feeling, has, in certain cases, made the act of relief to the offspring to be one of relief and pleasure also to the parent, by drawing off the milk from its breast, which, unless taken away, would be injurious to it. In birds, also, a peculiar feeling may be supposed to be caused in their bodies at the time of incubation, which can be relieved only by sitting on their eggs. Having been thus initiated by nature in the practice of these duties, the performance of them becomes in time an act of pleasure: it delights the parent to behold its offspring thriving under its care, while pity and sympathy are at the same time excited by its cries for protection; and the cause of the delight becomes transferred from the action occasioning it, to the very object itself; and thus the acquired feeling of affection is called in, and united with the natural one. The offspring are viewed by the parent as a part of itself, or as its property, and it is gratified by the possession of them. An animal but newly produced and lately disjoined from the body of its mother, to which it was closely united, and of which until very recently it actually formed a portion, might almost be considered, although separated from it, as still a part of its parent, on whom it is, as much as before, dependent for its existence, although at present its nutrition is a voluntary, which before was an involuntary and spontaneous act.

The helpless condition of the young of most species, when they are newly brought into the world, is calculated to excite pity in the parents; which, as already stated, is one of the constituents of affection. Their infantine gestures, and

early attempts to imitate the actions of their parents, are also highly calculated to excite sympathy.⁶

The best proof, indeed, that affection originates in the two causes already mentioned,—in the feeling of connexion with, and of gratification excited by the object of it—is the fact that those animals who, from the mode in which they are produced, experience no such feelings with regard to their offspring, are entirely destitute of affection towards them. Such is the case with the crocodile and the ostrich, who leave their eggs to chance, and never even recognize their young as belonging to them.

Connubial affection, in like manner, becomes acquired by the union or association with, and constantly deriving attachment from the pleasure occasioned by the society of, another of different sex; and by the production of offspring between them, a real and absolute connexion in blood, and natural affection, are also established. The feeling of affection is mutual between persons so connected; and in course of time is excited in the offspring towards their parent, in the same manner as in the parent towards the offspring. It is called forth in the offspring partially by gratitude, from having constantly received protection and nutriment from the parent, and in whose society it has experienced the greatest delight.

Affection differs further from the passion of love, not only because it does not cause excitement and perturbation in the mind, but, as already remarked, from being permanent instead of transient. Affection and love are, nevertheless, very frequently excited together towards the same object. Affection, however, does not lead a person to desire that intimate union, and inseparable connexion with the object of it that love does; but simply to aim at his well-being, and occasionally to enjoy his society. It is also not necessarily accompanied by, and is entirely independent of, the appetite of concupiscence.

2. *Common to certain other Beings, as well as to Man.*

The endowment termed affection, and more especially that of animal attachment, being possessed by animals as well as man, although, perhaps, lower in degree and kind; we may infer that beings of a higher order than that of man, possess correspondingly affection of a more exalted nature, and more extended in its quality. In the case of the Almighty especially, whose endowment in regard to emotion and passion has been referred

⁶ "The attachment of females to their young is produced by the trouble they have had in carrying them in the womb, and in producing and giving them suck."—*Buffon, Natural History.*

to, affection may be unlimited as regards its amount : and as, both in man and animals, parental affection and attachment is that which is the strongest or most openly manifested ; so in the case of the Deity, affection towards the beings whom He has created, may be infinite, alike in its extent, its exhibition, and its duration.

Angels, and spirits, and other intelligent beings, we may also suppose to be gifted with this endowment. Affection and animal attachment, however, being so intimately connected with animal nature, and their operation forming so important and so leading a characteristic in the economy of the animal system, it is essential that we should at once inquire into the extent to which animals in general possess affection and animal attachment ; which of them are so distinguished ; the peculiarities which this endowment exhibits in their nature ; and the essential difference in this feeling, as developed in animals and in man.

In pursuing a close, analytical inquiry into this part of our subject, it will be necessary to discriminate between the different modes in which affection and animal attachment in different beings develop themselves ; and to ascertain as far as possible the several branches into which this endowment may be divided.

An excitement of the nature of affection, may originate in a feeling of attachment towards an object which is either animate or inanimate, and may arise either from the consideration of its connexion with us, or from the pleasure which it has been the means of causing to us ; as a man is attached towards the home of his youth, or to a watch or other article, to the use of which he has long been accustomed. An impulse of this kind towards an inanimate or unintelligent object, constitutes, however, not affection, but animal attachment merely, being simpler and more gross than the former feeling. And this appears to me to be the sentiment by which animals in general are ordinarily impelled, and which often passes under the name of actual affection, such as exists in man, which is, however, an endowment of a more exalted nature, being called forth towards an animate or intelligent being ; grounded, indeed, on the feeling of animal attachment already described, but cemented and completed by the operation and decision of either instinct or reason in favour of such feeling.

On the whole therefore it seems that, although affection and animal attachment are often, and in fact ordinarily excited together—indeed, in certain cases the term is synonymous ;—yet that animals, except in certain extreme and peculiarly exciting emergencies, exhibit but comparatively little, although they doubtless possess a certain amount, of what may be strictly

termed affection; and that animal attachment is really all that by which they are in many instances impelled, even in their feelings towards their offspring, which are the most vigorously exerted of the excitements resembling affection.⁷ Thus among birds, in whom this feeling appears to be peculiarly strong, and where it is very obviously evinced, quite as much animal attachment is shown by them for their eggs⁸ as for their young, and for their nests as for their mates. This feeling of animal attachment, however, even in the case of animals, frequently ripens into actual affection.⁹

It is evident therefore that the boundary between the limits of affection and animal attachment is very narrow; and that it is extremely difficult in many cases to decide where the one commences, and the other ends. Thus, in the case of the feeling which a bird evinces towards its nest, animal attachment is

⁷ *Buffon*, however, remarks, that "everything good in love belongs to the brutes as well as to man." And he inquires, "Is there anything that exceeds the attachment of the dog to its master?" But he observes that while attachment may be possessed by animals, friendship belongs solely to man.—*Natural History, Nature of Animals*.

Dr. Priestley also observes that "a strong affection of mind, leading to a permanent friendship, constitutes the principal part of the tie in the human species; whereas brutes are not capable of so great a degree of refinement."—*On Education*, p. 184.

On this subject I have been favoured with the following note from *Professor De Quatrefages*. After remarking on the difficulty of satisfactorily investigating the subject of the affections and character, the complicated nature of their phenomena, and of the problems involved in them, and that by the study of facts alone we ought to be guided in our researches; he proceeds to observe that with respect to animals, "As regards affection, it is clear to me that it exists. A dog will incur death for the sake of its master. This is affection carried even to devotion. The dog has also its marked preferences and its antipathies. I doubt much whether these sentiments have the nature of reason, and belong to intelligence. However, in the case of dogs, there is the exercise of the sense of smelling. It may be that a man has for them a *good smell* or a *bad smell*; for each one of us has his peculiar odour, which the dog evidently distinguishes as we distinguish colours. But, on the other hand, man gains his point as regards certain antipathies of animals, by a union of firmness and good management. In one of my visits to the sea-side, I amused myself with obtaining in this way the mastery over a dog which was regarded as fierce, and which in the first instance showed towards me a disposition anything but friendly. At the end of my visit we were quite good friends, and he bore from me what he would not have done from any one else."

⁸ *Mr. Darwin* states that female spiders often show the strongest affection for their eggs, which they carry about enveloped in a silken web. *Descent of Man, &c.*, vol. i. p. 328.

⁹ *Captain Cook* remarked on the extraordinary degree of affection exhibited by bears towards their young.—*Cook's Voyages*, vol. vi. p. 2170.

On the other hand, *Mr. Darwin* tells us that, owing to the strength of the migratory instinct, "late in the autumn, swallows and house-martins frequently desert their tender young, leaving them to perish miserably in their nests."—*Descent of Man, &c.*, vol. i. p. 84.

doubtless that which is excited. Towards the eggs too, which are as unintelligent as the nest, the same feeling prevails. But an egg after a time contains a young animal. At what precise period, therefore, does animal attachment towards it cease, and affection commence? A new-born child is but little more animate than, and is nearly as unintelligent as, an egg. Does it call forth in the parents' breast affection, or only animal attachment? If, on the other hand, it be urged that something beyond mere animal attachment must be necessarily that which excites animals when they are vehemently moved on account of the loss of their mates, or their young; it may be replied that even man himself has occasionally, to all appearance, suffered as much from the deprivation of objects of animal attachment as from parting with those of affection. Loss of property has distracted some, equally with what the loss of children has others; and the failure of an object of ambitious pursuit, has been more deeply mourned than the death of the nearest relative.

Instinct aids and urges on animals in the exercise of affection and animal attachment, in a manner analogous to that in which reason directs man; and instinct appears to be quite sufficient for that purpose, so far as the complete constitution of affection is concerned, whenever instinct is duly developed. Consequently, in those animals where this is the case, affection may exist to the full; but where instinct is wanting, affection will be proportionably deficient. Nevertheless, reason renders affection in man generally more powerful and more permanent than it is in animals. In some particular animals, however, affection appears to be more vehement than it is in man, and also more pure and disinterested. But this is not because affection itself is actually stronger or more exalted in them, but because its operation in the case of animals is not interfered with by that of the intellectual and moral faculties and endowments, as in the case of man, either as regards their excitement, or the objects towards which they are directed. Probably, in most animals, affection even towards their offspring is somewhat of the strength and nature of animal attachment among men to some favourite inanimate object or place, for the deprivation of which they grieve for a time, while the remembrance of the loss of the gratification arising from it remains; but which, having no support from the reason or other intellectual powers, soon dies away.¹ In some animals, however, and where circumstances contribute to stimulate this excitement, affection is much more vehement than in others. Nevertheless, in ordinary cases, affection in animals corresponds with mere animal attachment in man, and animal attachment in man with affection in animals.

¹ *Buffon* compares the friendship or affection of an animal to that of a girl for her favourite bird, or of a child for its plaything. "Both are equally blind and void of affection."—*Natural History, Nature of Animals.*

In many animals affection, or animal attachment, seems to be the predominant and most influential endowment in their nature; and some of the most sluggish and dull² appear to be excited by this feeling only, which, moreover, serves to develop the instinctive endowments. The main end of the creation of particular animals being apparently, the propagation of their species for certain purposes in the economy of the world, affection in them has been rendered very vigorous and very influential. Indeed, in many instances, animal nature appears in nothing so perfect and so noble as in the exhibition of affection. Here indeed animals occasionally excel man, almost as much as man excels them in intellectual power. And affection for offspring may be said to be the chain, insensible though most powerful, which, extending from the Supreme Creator to the humblest of His creatures, serves to blend together in one common and mighty bond of union, the great family of intelligent nature, and is the characteristic which serves to proclaim their common origin from Him. This endowment, moreover, is the grand general conservator of the animal creation.

While in man some exercise of the reason is required to excite affection, in the case of animals it bursts forth spontaneously, being generated by the operation of the emotions and instinctive endowments only, which are far more active than the moral and intellectual powers. But, as already observed, although in animals affection is more easily excited, it is less during than in man. Thus, an animal mourning over the loss of its young, grieves intensely so long as the vacuity caused by the absence of the object of affection continues to be felt; but as soon as this is over, all sorrow dies away. In the case of man, in addition to this feeling of vacuity, the different intellectual capacities are set in operation; the value to him of the individual lost is ever and anon presented, his virtues are recollected, his lost prospects speculated upon, and ideas of him are constantly passing through the mind, and being recalled by the memory.

As far as I can discern, neither animals nor men possess any innate spontaneous affection towards, or aversion to one another, uninfluenced by external causes; but they are wholly indifferent as regards each other. A feeling or consciousness of mutual connexion or dependence, first begets affection for another individual. Natural affection among animals appears much more powerful than that which is acquired or artificial; and affection towards their young is that species of natural affection which, with them, is the most strong. Particular animals, indeed, appear to possess affection for their offspring, and to confine it to them; others extend it to their mates, and some to

² *Mr. Darwin* remarks that even the *Gasteropoda* "appear susceptible of some degree of permanent attachment."—*Descent of Man*, &c., vol. i. p. 325.

many other objects. Among certain animals affection is exhibited towards their offspring, and animal attachment to other subjects.³ In several animals animal attachment seems to be all that is ever exhibited.

The care evinced by animals towards their offspring, whether resulting from actual affection or mere animal attachment, is the more remarkable as it is exercised by those only where this care is necessary. Where the preservation of the species does not depend on the possession of this endowment, the animal is destitute of it. Thus, in the ostrich and the crocodile already alluded to, as in many other creatures, and as is also the case with most fishes and insects whose efforts are not required for the protection and nutriment of their offspring, their eggs and young are left entirely to chance, and to shift altogether for themselves. In some of these animals, however, an anxiety about their progeny is exhibited, but in quite a different manner; as where they are induced to take great pains in depositing their eggs in suitable spots.⁴ In each animal, probably, the peculiar kind of care that is especially needed, is that which is called forth and bestowed.

While some creatures exhibit great affection for their mates as well as for their young, others, although towards their mates they evince strongly the sexual appetite, appear to be wholly destitute of affection for them, and even of animal attachment.

3. *Its various Qualities and Kinds.*

The varieties exhibited in different persons and animals, with respect both to affection and animal attachment, depend in part on the nature of the being in which this excitement is produced, and in part on the object by which it is called forth. As regards the beings themselves, not only do different orders vary widely one from another, according to their relative proportionate possession of the several constituents of this endowment already described, with respect alike to their actual capability of being moved by both affection and animal attachment, and the extent to which they are thus excited; but different individuals of our own species also vary extensively and essentially in this respect, as a very casual acquaintance with human nature will serve to convince us. Circumstances of different kinds also occa-

³ *Prof. C. J. Plumptre* expresses an opinion in regard to this statement, that "the affection of animals for man, when it is once formed, is deeper than that for each other; and dogs notably have seemed to pine to death for the loss of a master to whom they were specially attached."

⁴ Certain animals, indeed, appear to present the extraordinary anomaly of evincing great affection for, and care about, their eggs, but none whatever for their offspring; while others, which exhibit strong affection for their young, seem careless and indifferent as to what becomes of their eggs.

sion an immense diversity here; and possibly such circumstances create as wide a distinction between different persons as regards their susceptibility of, and excitement by, affection and animal attachment, as nature does between creatures of a different race.

Different objects serve to excite both affection and animal attachment, not only in very different degrees, but in a manner very different as to its actual nature, and oftentimes in a mode closely characteristic of those objects themselves. Even in animals, we see a marked distinction, corresponding with the varieties in the exciting cause. In man, this difference must necessarily be proportionably greater and more essential than in the lower creatures. Thus, whether the exciting object be one of our own offspring or merely a friend, whether it be an animate creature of another species or merely an inanimate substance, the mode in which both affection and animal attachment operate towards it, must be necessarily very different. In both these cases, however, the operation in man of the intellectual faculties, will contribute to increase the variety in quality both of affection and animal attachment beyond that experienced in animals; who will, however, in turn, be each excited by it, according to the extent and nature and peculiarity of their instinctive constitution and development.

Both affection and animal attachment may correctly be distinguished into three several kinds, varying from one another both as to their essential nature, and their exciting causes and objects. Affection of the first kind, both in the case of man and animals, is that which arises and subsists between parents and children, or what is ordinarily termed parental affection; and which may be supposed to originate in the consciousness of connexion with the object of such excitement. The second kind, which may be termed acquired affection, is that which is excited and subsists between friends, who are united together by the ties of good offices, and mutual esteem and attachment, which gradually ripens into ardent affection.⁵ The third kind is affection, or rather animal attachment towards particular localities, which may be ordinarily supposed to originate in the consciousness of a certain connexion with the places so liked, and is further cemented by the pleasurable associations attached to them. As regards the two first of these classes, affection rather than animal attachment is that which is ordinarily excited both in man and in animals of high instinctive endowment. In the case of the third of them, animal attachment only, is that which is

⁵ "We are inclined to make friends of men of congenial characters and of similar pursuits, unless where an interference of interests takes place."—*Aristotle's Rhetoric*, b. ii. c. 4.

Cicero defines friendship to be "a perfect conformity of opinions on all religions and civil subjects, united with the highest degree of natural esteem and affection."—*Lælius*.

generally felt, even with respect to man. In animals, the excitement of fondness towards localities appears to be more vehement than it is in man, and consequently more likely to ripen into animal attachment. Next to parental affection, it seems in their case to be the most vigorous, from the feeling probably of connexion with the object.

Animal attachment, indeed, is displayed most strongly towards places; and here it is probably, nearly, if not quite, as strong as affection. But towards other inanimate insensible objects, it is also exhibited. It is early evinced by children in their fondness for their toys, and not less in old age by the attachment of the miser towards his money. Infants newly born, and before intelligence is infused into them, are, as already stated, perhaps the legitimate objects rather of animal attachment than of affection. They certainly are so if the essential distinction between the two consists in the one being a feeling of attachment towards an animate and intelligent being, aided and confirmed by the operation of the reason, and cemented by the conviction that the object of affection is capable of appreciating and returning this feeling; and in the other being an excitement of certain of the emotions only towards an inanimate, unintelligent object, unaccompanied by any mental operation or conclusion which leads us on this account to desire affinity with the object of such attachment.

Attachment to places appears to be quite independent of this feeling towards any persons who may be connected or associated with them. It often happens, indeed, that we delight much in a particular locality, although we are wholly indifferent about the people who inhabit it. In other cases we are strongly attached to the people, but dislike the place where they live. Occasionally, however, liking the persons may originate or strengthen our attachment to the place; while liking the place may increase our attachment to the persons who dwell there.

In all these cases, the varieties in affection and animal attachment will be found to be regulated by the two causes already described; the difference in the constitution of the being so excited, and the difference in the object of excitement. The nature and quality of the emotions, and their individual characteristics, as well as of those of the other medial endowments, must not only be fully taken into account in tracing the efficient causes as to the variety of affection and animal attachment in different beings, together with the qualities and condition of the material frame, which cannot be without its influence here; but also the reciprocal influence of each of these endowments on the other, and the result of their existence together.

A further division, as regards the different kinds of affection, might be made into that which is natural, and that which is

resulting. Natural affection is that which is called forth in any being, from a feeling or consciousness of affinity or connexion with the object of it. Resulting affection is that which is produced by some action or quality in the object of it, exciting gratitude or the like emotion towards it, which generates affection of this sort. In most cases, however, affection is of a mixed kind, being compounded of each of those of the forementioned qualities.

4. *The Exciting Cause, and Sustaining Stimulus, of this Endowment.*

Two very important and leading considerations connected with the subject of the present chapter, being the question as to the real, principal, and essential exciting cause, and also as to the sustaining stimulus, both of affection and animal attachment, demand of themselves to be here made a distinct subject of inquiry.

Affection originates in the natural innate desire of the soul to extend itself, or its operations, beyond the sphere of its own confines, and also to unite to itself whatever object it delights in, especially when of a species allied to its own nature; and to blend itself, as it were, with it, so as to form a part of itself; wherein it seems near akin to, although it is essentially distinct from, love. Indeed, it occasionally happens that, when no object of affection of the same nature with itself is obtained, the soul will fix on one of a lower grade towards which this feeling may be evinced, such as an animal. That consequently which, from the foregoing considerations, may be clearly concluded to be the essentially exciting cause both of affection and animal attachment in most cases, is the consciousness of a connexion of some kind or other between the object of it and the being so excited; and the closer is this connexion, and the more firmly cemented by intelligence, either intellectual or instinctive, is the excitement itself, the more vigorous and influential does it appear. Thus, to our own offspring, and to our parents, we are attached the most firmly, as they are an actual part of ourselves. Places too with which we have been long connected, so that they have become inseparably associated with all our thoughts and actions, become proportionably subjects, not merely of attachment, but almost of affection.

In order to generate natural affection, there must, however, be some obvious object of it of an intelligent nature, nearly connected with us. Thus, we have no natural affection for persons whom we have never seen, although they may be our parents or brothers. Even for our own children, we could in such a case feel affection solely from the consideration that they are a part of ourselves. Affection, however, here originates, rather in a

deduction of the reason than from any consciousness of affinity to the object of it.

Affection is, nevertheless, satisfied with a less close connexion, with the object of it than is either concupiscence or love. It originates, or consists, in a desire rather for the well-being of, than for a constant union, or close affinity with, the object of it. And as it is, from this circumstance, more easily gratified than is either the appetite or the passion alluded to, it is much more permanent. Unlike them, too, it is steady and fixed, and not liable to constant ebbs and flows; although, on the other hand, certain circumstances may arise which will tend to promote its increase, and others its decrease.

There are no doubt, indeed, in the intellectual as well as in the material world, principles of attraction and repulsion, which are as influential, and as constantly exercised in the one as in the other. Attachment and aversion are the emotions by which these opposing forces are excited and directed, in the case of the former; and they constitute the springs of action in most of our medial operations. The result of attachment is experienced in its lowest effort in the mere desire to be in the company of another whom we like; in its highest, in the desire for close intimacy with that individual. The lowest effort of aversion is the avoidance of the society of one whom we dislike; its highest effort is the desire to take away the life of that person.

In the production of affection, sympathy,⁶ in certain cases, both takes the place of irritation, and supplies the want of it. The excitement of the former emotion must, however, necessarily depend more or less on the nature and character of the object of affection as regards its adaptation to excite our sympathy. To some extent, particular causes existing in the material frame, may contribute to occasion variety in the exhibition of both affection and animal attachment in different beings; although we may infer that affection and animal attachment are but to a very slight degree directly dependent on the material frame, either for their excitement or their existence. While belonging to the medial part of our constitution, this endowment, in the case of man, depends mainly for its production on the moral and mental attributes, and on the emotions connected with the latter. Consequently, affection and animal attachment are but very little, if at all, directly dependent for their original excitement upon the condition of the body, although they may be more or less indirectly so for their vigour and energy. As regards the particular

⁶ "Of all the societies and unions amongst men, there is none more excellent, or more closely knit, than when such as are men of real virtue and honesty, from a certain agreement and likeness in their manners, contract a familiarity and friendship one with another."—*Cicero's Offices*, b. i. c. 17.

qualities appertaining to affection, they are probably in each case mainly dependent upon the vigour and energy characteristic of the individual soul or instinctive being in which they are experienced.

The sustentation of affection when once excited, depends to a large extent on the nature of the emotions called forth in us by the object of them, more especially whether the tendency of these emotions be pleasurable or painful. Thus, the nurture of the young, which is directly productive of pleasure, sustains and cements affection towards them; while, on the other hand, any painful emotions habitually caused by the object of affection, as by its misconduct, contributes to weaken the feeling.

The grand and leading sustaining stimulus, however, of affection, and in some instances of animal attachment also, in the case of man, is the reason, by which this excitement is preserved long after the vibrations occasioned by emotion have ceased, and new causes for its production are constantly supplied. Reason is, indeed, far more essential to keep alive, than to excite affection, which is the main cause why in animals both affection and animal attachment are so much more easily and more frequently excited than they are sustained. Nevertheless, those among mankind who are the most rational and intellectual, are not by any means the most affectionate also; inasmuch as, although a certain amount of mental vigour is requisite to sustain affection, yet when intellectual capacity is very extensive, and is energetically exerted, it is apt to influence the mind to other pursuits rather than those of affection. It induces it to soar too high, and will often lead it to despise the humble virtues of domestic life, in pursuit of the lofty cravings of intellectual ambition.

Affection and animal attachment do not in all cases essentially depend, as regards their continuance and durability, on a consciousness of actual connexion between the object of them and the being so excited; although they may, and frequently do, originate in this circumstance. But this feeling is also experienced between beings of quite a different order, and between whom there can be no sort of close affinity; as in the case of its subsistence between man and animals, or between animals of an entirely different race, such as birds and beasts. Here indeed a consciousness of mutual dependence or mutual good offices may have contributed to its production, and which to a certain extent may be said to establish also a connexion. In these cases, however, the essential exciting cause, and also the sustaining stimulus of affection and animal attachment, consist in the experience of pleasure occasioned both by the object, and from the exercise of these feelings. Nevertheless, it is probable that in most of these cases, animal attachment only is that which is experienced.

Affection for offspring is not at all dependent upon or influenced by the natural disposition of the individual as regards those qualities which appear most directly connected with its exercise, such as benevolence, amiability, and the like; inasmuch as animals of the most fierce and savage nature are endowed with affection to the fullest extent, and of the most vigorous kind: while those animals which are placid and mild, and apparently very amiable in their disposition, are often, at the same time, weak and unstable in their affections and attachments.

Nor is it in all cases, essential for the sustentation of affection towards any object, that it should be reciprocated by it.⁷ The strongest affection is often manifested by the parent towards its offspring, before the offspring is capable of returning, or perhaps of being conscious of its exercise. And, as already stated, the affection or attachment of birds, is excited not only towards their young, but towards their eggs. Among mankind, where, at any rate, the return of affection would be both observed and appreciated, some of the strongest instances of the affection of parents towards their children, have been exhibited in cases where the object of it was so dull or degraded, as to have been incapable of returning this feeling.⁸ Indeed, where affection is reciprocal, it generally happens that other influences besides affection, operate to bind together both the agent and the object. Consequently, the purer affection is, the less need it has of external support.

There is, moreover, this essential difference, already adverted to,⁹ and ever to be borne in mind, between love and affection, as regards their objects and modes of operation; that while love admits of, and can be directed with vigour to but one object, affection is capable of being excited towards several objects simultaneously. And that while love for any being is greatly diminished, and almost extinguished, by the excitement of a new object of it; it is not at all affected or diminished by the excitement of affection towards different objects, contemporaneously with the existence of the passion.

⁷ According to *Aristotle*, however, "friendship implies a reciprocity of affection; that both friends love, and both be beloved."—*Aristotle's Ethics*, b. ii. c. 4.

⁸ Thus, in the case of idiot children, while, on the one hand, the affection of the parent may be decreased, or tend to subside into mere animal attachment, on account of their not being able to reciprocate this feeling; on the other hand, this tendency will be counter-balanced by the large amount of sympathy which is excited towards them in the breast of the parent, on account of their pitiable condition.

⁹ *Vide ante*, pp. 349, 37

5. *Circumstances mainly contributing to its Development and Vigour.*

The original development, and also the ultimate vigour attained both by affection and animal attachment, in every being, depend in the first place, although but indirectly, on the maturity of its material frame, so far at least that the intellectual or instinctive powers must at such a period be able to exert themselves; for, until this is the case, although appetite, and even passion, may be indulged, such a being is incapable of being moved by either affection or animal attachment. The development in a direct manner both of affection and animal attachment, and also the vigour which they attain, depend moreover extensively on the circumstances by which the being so moved is surrounded, through which the exercise of this endowment is called forth; more especially the presence, or existence, of objects strongly calculated to excite, and to draw out this feeling. The maturity of affection, and in certain cases of animal attachment also, is consequently ordinarily coeval with the development of intelligence, whether intellectual or instinctive.

It may nevertheless be inferred that the precise period of what might be termed the full tide of parental affection, varies both in the offspring and in the parents. In the former, it is most vigorous during youth, when it is principally developed, both from a perception of dependence upon the parents, and from the numerous offices of affection which are at that period exercised. Probably also, there is less at that period than in maturer age, to interfere with and counteract its operation; besides which, the heart is then more susceptible of the emotions which affection excites. In the case of the parents, it appears to be strongest when the offspring is in its infancy and youth, and has most need of parental care.

Affection, like passion, is possibly however most active, although not most vigorous, during the earlier stages of existence; and most vigorous, when age is more advanced. Both affection and animal attachment are, nevertheless, but little directly dependent upon age, either for their activity or vigour, except so far as the exercise of the intellectual or instinctive powers is dependent upon corporeal development, and according as external circumstances vary with our condition in this respect; inasmuch as, as already pointed out, the state of the material frame has but little immediate influence on the exercise of this endowment.

But neither maturity of the material frame, nor intelligence, so far as it is dependent upon this maturity, are sufficient of themselves to develope or perfect either affection or animal attachment, unless suitable circumstances coincide to contribute

to this result. Thus, many birds of great intelligence, as also certain fishes and insects, appear to be altogether destitute of either affection or animal attachment of any kind, or in the smallest degree, even towards their offspring; and not only, as already remarked, leave their eggs, and their young to provide for themselves, without bestowing any care upon them, but are often the first to devour them. The reason of this is, that the economy of their nature, and the circumstances attendant upon their career, do not either require or contribute to, in their case, the development and exercise of either affection or animal attachment. On the other hand, among those particular animals, whether birds, fishes, or insects, where the exercise of affection is required for the preservation or well-being of the offspring, we find it developed and exerted to the full. In the case of vegetables, where no developing cause or circumstance exists to call forth affection or animal attachment, they are entirely destitute of this endowment, and of every thing analogous to it; except so far as regards the provisions made in their physical constitution and development for the preservation of their seeds and shoots. But in this respect, they correspond with intelligent beings, not as regards their medial endowments, but their material structure only.

As in the case of the appetites and passions, so also in that of affection and animal attachment, nothing more directly contributes to their invigoration, than their exercise and indulgence. Thus, the possession of children, serves extensively to develop affection; and the want of them, or of other objects of this endowment, is calculated to make the heart callous. Nevertheless, affection is never more powerfully stimulated than by the withdrawal of the object of it. Our regret for its loss, first proves to us how dear was its presence; and the blank created by its absence, is as palpable as was the very object itself.

Indeed, until affection and animal attachment are not only developed but tested, we are not made aware either of their strength or their extent, and in many cases not even of their existence. So long as the object is before us, and is as it were united to us, we do not feel the force of our feeling towards it, which is only proved when the tie is severed. Something of this sort is perhaps the case with regard to many other things which are of importance to us. The possession of sight and the other senses, of bodily health and worldly possessions, are often but little prized by those who have had an uninterrupted enjoyment of them, and who are never in fear of losing them. Thus it is also with an object of affection, that while it continues united to us, or within our reach, we do not perceive the vehemence of our feeling towards it, as the magnet ceases to attract bodies already joined to it. But directly that the object is removed, or some apparent danger of its removal arises, all our

affection towards it is at once both developed and felt ; and the force of this magnetic power, as it were, of the soul, which before had lain dormant, although in full being and vigour, is forthwith exerted to the utmost.

6. *Its legitimate Objects, Functions, and Influence.*

The precise, peculiar, and legitimate objects aimed at, and the operations effected, both by affection and animal attachment, when fully developed and extensively exerted, and the large share of influence exercised by this endowment over the whole economy of our system, deserve next to be inquired into; through which in some instances, both in man and animals, the whole character appears to be temporarily, and in a few special cases even permanently changed, certain of the emotions being invigorated, and particular passions excited, while others are no less extensively subdued or altered.

As affection is one of the most vigorous, so is it also one of the most valuable, and indeed essential, of all the medial endowments of man ; and with this endowment, as has already been remarked, most animals are to some extent gifted. The exercise of affection towards our offspring has, moreover, a softening and humanizing effect on the whole moral constitution ; and, from being accustomed to exercise this feeling habitually towards their children, parents acquire the habit of extending their sympathies towards their friends in general, and in time to mankind at large, or to all with whom they carry on intercourse. Its influence is, consequently, eminently beneficial to civilization and to society, leading men to care for others as well as themselves ; and to be more regardful of the welfare of those about them, and less exclusively devoted to their own.¹

The strongest and most permanent of all ties are, indeed, those which affection cements. This creates a union which no force can dissolve, no power rend asunder, and which is terminable only by the death of the beings thus blended into one. The junction of souls bound together by affection, is, like those souls themselves, imperishable and immortal. Hence, affection firmly rooted is of all the feelings the most difficult to eradicate. The emotions and appetites are always transient, like the flitting clouds of summer ; and passions but seldom continue to hover over us when the occasion of their excitement has passed away. By

¹ In the case of animals, however, an opposite economy appears to prevail. Thus : " In those species in which the solicitude of the parents is closely concentrated upon the interests of the family, we see no affection for the species in general ; rather a decided hatred for those of their fellows who are not of the same family."—*Le Roy on the Intelligence and Perfectibility of Animals, Letter V.*

a wise and beneficent economy in our constitution it is however provided that, while these latter turbulent agencies are thus ephemeral; affection, which is benign and beneficial in its nature, may be as lasting as life itself—nay, eternal in duration.

So prone, indeed, are both men and animals to exercise affection, and such pleasure does the operation occasion, while a painful feeling of vacancy or hunger, as it were, is produced in the soul or instinctive being by the neglect to appease it; that when no natural object is supplied towards which it may be exerted, such as the offspring or near kindred of the individual or animal, the want of this will, as already remarked, be frequently supplied by some creature of a different species, upon which in time affection will be as firmly riveted as though it had been excited by a legitimate object. Thus, animals that have lost their young will adopt the progeny of another race; and solitary animals, which have no others of their own order towards whom they might be attached, will fix their affections on a man, or on some animal of a kind quite different from their own. Nor are human beings less impelled than are animals to exercise this endowment, and to supply subjects towards which it may be exerted; for when deprived of, or wanting in, a legitimate object upon which to place it, we find them adopting creatures of various kinds as their pets, towards which affection is as strongly drawn as if a wife or child were its object.

Self-love, the care and anxiety for our own well-being, is, however, after all, the centre and the source of excitement as regards every operation which is effected, either through attachment, aversion, or affection. That care and anxiety, when our own welfare is secure, are extended first to our own offspring, as a part of ourselves, and as derived from us, on the one hand; and to the Deity, of whom we are a part, and from whom we are ourselves derived, on the other. Hence affection really and essentially originates in self-love,² and is produced by the operation of that principle acting towards, and exciting us in regard to, another being who may, nevertheless, be actually independent of, although closely connected with us.

Self-love urges us primarily and mainly to promote and ensure our own welfare, and preservation, and the safety of those with whom we are closely connected; and secondarily, our own happiness and well-being, and the welfare of individuals united to us. There is nothing at which the soul so vehemently

² "The notion of love we have for ourselves extends to that which is admired."—*Malebranche, Search after Truth*, book v. c. 4.

Dr. Innes also observes that from seeing those qualities in himself which a man values, possessed by another, he is induced to become attached to him. "And what is this but loving himself in another, or being moved and influenced by self-interest." Hence, also, he concludes that "the sole and universal motive to virtuous actions is self-love, interest, or pleasure."—*Enquiry into the Original of Moral Virtue*, p. 318.

revolts, as the idea of annihilation. And there is nothing for which we so ceaselessly strive, as our own preservation and safety.

Hence, moreover, even our love for the Deity, which is the foundation of all religion, is based on self-love. For, as already observed, we love Him as a part of ourselves, from whom we, in common with creation at large, originally derived our being and our existence; in a manner analogous to that in which we love our parents, because we immediately derived our being from them. Hence, moreover, the reward of the righteous consists essentially, in an eternal, and an intimate union with God. The punishment of the wicked consists essentially, in being for ever disunited from Him, and banished from His presence.

A question might here be raised, whether a person is bound to prefer any other being to himself, in whom there appears to centre, not only all his wishes, but everything that is actually essential to him? Whether even God Himself, is really to be preferred to one's own self? With man in general, and as an individual man, his ultimate, and highest aim and object, are his own particular welfare; and it is solely in connexion with, and in reference to this object, that he has any care at all. This is the goal to which all his hopes and wishes are directed, and by which they each are modified and regulated. He worships God mainly, not from any natural affection towards God, but out of regard to duty; which regard to duty, however, springs entirely from self-interest. And even in the case of patriotism, self-interest is the ultimate moving spring, so far as it arises from the consideration that the glory which will redound from a man's noble deeds, will more than compensate for the actual loss and pain which he sustains. Would any man sacrifice his all for his country, if he felt sure that his sacrifice would always remain a secret to every one?

But it may be urged that a man will occasionally exhibit more anxiety for his wife or children's safety or welfare, than for his own; and that if he prefers any other beings to himself, he surely would do so as regards his Creator. Here, however, we may reply, that he prefers the welfare of his wife and children, not as independent beings, but as a part of himself. And, in the next place, the feeling of sympathy, and the affection excited by their condition, have a greater external and visible influence over him, than any feeling with regard to himself. Even in patriotism, the strength of the feeling is, in a great measure, owing to our considering our country as a part of ourselves.

On the whole, therefore, it appears to me that we ourselves, individually, in every case, constitute the first consideration with each of us. All other beings are regarded by us merely as they affect, or stand in relation to us. However vast, good, or important, any other person is, his sole real importance to us is in

relation to ourselves. Care for self, is ever the centre, and the foundation, of all our desires and aims, however widely they may eventually radiate from this point. Nor does it appear that strict justice or duty really demand of us anything beyond this.

As God is the highest and most perfect of all intelligent beings, so in Him, as already pointed out, is affection most perfectly developed and displayed, more especially towards mankind, who, as His offspring, are its legitimate objects.

We appear, nevertheless, to have no natural affection towards God; and the main and obvious reason of this is, that He is of a nature so totally and so widely differing from our own, as to prevent, at once, all feeling of affinity, even though we acknowledge Him as our Father. Resulting affection we may feel largely towards Him, and which arises from a consciousness of the many acts of bounty and goodness, performed by Him towards us, as well as from the consideration that He is our Creator, the real author of our being. Indeed, He Himself seems fully to justify, and uphold, the principle here maintained; inasmuch as He rests His claim to our affection, mainly upon the benefits which He has conferred on us. And indeed He urges us to obedience by the prospect of reward and punishment, wholly independent of abstract duty. Adoration, rather than affection, is, however, that which He mainly exacts; and which we at once, and unhesitatingly acknowledge ourselves to owe.³

Our recognition of God as our Father, is in fact rather a deduction of the reason, than an obvious truth of which we are not only convinced, but feel the obligation. Hence, it fails to generate natural affection, both because He is in His nature so remote from ours, and also because we have no personal intercourse with, or visible or direct knowledge of Him. Thus also, as already remarked, we have no natural affection even for a near relation, whom we have never seen; although the affinity to us must be admitted to be of the closest kind. As regards however the resulting affection that we owe to God, this is in its extent as great and as infinite as is His goodness towards us; corresponding with the infinity of adoration which is due to a Being of such omnipotence and glory, in whom, alone, "we live and move;" and to whom we owe our very existence.⁴

³ *Hobbes* observes that in the case of love to God, "there to love is to be delighted with the image or conception of the thing loved; but God is inconceivable. To love God, therefore, in the Scriptures, is to obey His commandments, and to love one another."—*Human Nature*, c. 11.

⁴ "The most wicked and barbarous men, idolaters and atheists, themselves, are united to God by a natural love, of which, consequently, self-love is not the cause; for they are united to him by their love to truth, justice, and virtue."—*Malebranche*, *Search after Truth*, b. v. c. 7.

Affection often greatly stimulates the exercise both of the intellectual and instinctive operations, and invigorates the action alike of the emotions and passions. It seems, however, rather to blunt and retard the exertion of the appetites. The reason of this is, that it has always reference to others, instead of to ourselves. The character is, moreover, sometimes apparently much changed by the influence of affection: both in animals and in man, the most timid become through affection the most courageous; and when they are stimulated either by anger, or affection, the emotions of fear are wholly subjugated to these impulses.

But as affection does not, like the appetites and passions, tend at all to debase the soul by its influence over it; so through the exercise of affection, no purgation of the soul is wrought, and no operation is performed, which, as in the case of the gratification of the appetites and passions, frees the soul from the influence of a desire to which, until so liberated, it was subject. Affection, indeed, does not, like the appetites and passions, cease to operate when its desire has been gratified.

Affection may, however, lead different beings on, either to good or to evil, through the impulses which it creates; for although its essential tendency, and its immediate object, may be productive of virtue, yet this result may be sought for by unwarrantable means. Indeed, some of the most heinous crimes of which men have been guilty, have been perpetrated in the holy cause of affection. And affection glows nowhere more intensely, than in the fierce and cruel breasts of animals of prey. In addition to this, affection will be found to be the main stimulant to their excesses.

Nevertheless, there is probably no medial endowment which could so ill be dispensed with, either in the nature of man or in that of animals, as affection. Indeed, it is as essential to their constitution, as members both of families and societies, as their intellectual, instinctive, and moral qualities are to them as individuals. By this endowment, both man and animals are bound together for mutual aid and protection; and although each vary alike as to the mode and the extent of its operation, yet in each it tends to the same result. Affection is, however, frequently very eccentrically exercised, more especially as regards the objects towards which it is directed. Prejudice and perversion of the reason, are the main cause of this irregularity; which is, consequently, more common in the case of man, than in that of animals.

Among mankind, affection will, of course, be the strongest in those where the leading causes which I have described as contributing to originate and sustain it, are found most extensively existent. Thus, persons are apt to be chiefly attached to those of their own family (circumstances, as regards the others,

not interfering to affect this result) who are nearest to their own age, because they have been the longest, and most intimately associated with them; having grown from infancy to manhood together, and their natural faculties, and dispositions, and feelings, and thoughts, and habits, having been together contemporaneously developed. With those much older or much younger, they have not the same community of feelings, or ideas. On this account, parents are not so closely associated with their children, as the children are one with another.⁵ Intimacy alone of any kind, generates affection, provided that it has been productive of pleasure and regard,—such as that between masters and servants—although the intimacy here is not close; but the want of this may be atoned for by the length of time during which the connexion has subsisted, or the extent of benefit resulting from the connexion.

Friendships formed very early in life, are perhaps the most binding upon the heart. To these, however, we were commonly induced mainly by the medial impulses and excitements, as also, in a very great degree, by mere accident. In later life, we are impelled less by chance in our friendships and intimacies, as our choice is more extended, and we are more free to select objects of it, while reason has the main influence in directing, or at any rate, in regulating our decision; and among those of cultivated minds, the intellectual qualities and endowments, rather than moral disposition alone (which should never indeed be disregarded, although not to be allowed an undue share of influence here), are what chiefly regulate their adoption. Consequently, friendships of the latter kind, rest on a more solid basis than those of the former, although they are possibly less during. Friendship and affection of the former kind, are supported principally by long association and habit, to break through which we are ever loth; those of the latter kind, by real regard and esteem for the objects of them. Thus, while we become attached to one spot from being long accustomed to dwell there, and from the train of numerous associations in our mind connected with it; another spot we love on account of the actual beauties and advantages which it possesses. An attachment to the latter, is doubtless of a much higher nature than that to the former. So is it also with respect to the friendships of childhood and manhood, of feeling and chance, and those of choice and reason.⁶ Marriages originating in very early attachments, are

⁵ “The relation of brothers is that of equal companions, resulting from the near similitude of their strength and stature, their common education, and similar manners.”—*Aristotle's Ethics*, b. vii. c. 11.

⁶ “Those intimacies alone can justly be taken into consideration, which are formed at a time of life when men's characters are decided, and their judgments arrived at maturity.”—*Cicero, Lælius*.

seldom the most judicious, or the most suitable. Friendships and affection of the best and most desirable quality, will probably, be formed at that period of life, when the reason is sufficiently matured to guide us aright, and has gained sufficient strength to subdue those feelings which might pervert our choice; but at the same time before age has hardened the heart, and made us callous to the more amiable excitements and impulses of our nature.⁷

So far, however, from affection being always the most vigorous between those whose acquaintance commenced during childhood, on account of this feeling having been cherished as they grew up, and entwined in each other's hearts; we find that the strongest affection exists very often between persons who did not become acquainted with each other until they had arrived at maturity, as in the case of that between husband and wife: and as regards that which is experienced by parents towards their children, even this is not generally excited to the full in the parents until the offspring have attained some degree of intelligence.

Affection and animal attachment, as is also the case with passion, are, as has already been pointed out, always excited towards some other being or object; whereas appetite is excited in the body quite independent of any external cause or being, although an external object alone can appease it. As affection could not subsist or be called forth where a person lived all alone, and without having intercourse with, or being conscious of the existence of any other person; so the appetite of concupiscence could not in such a case be stimulated by the presence of an object of it; although, unlike affection, it could be excited without such object.

Hence it might happen, although such an occurrence is highly improbable, that neither affection nor passion were ever stimulated in any particular individual, but, although dormant, would always be actually there existent; which must indeed necessarily be the case if no object was present towards which they might be directed, as in the case of an entirely solitary being. Even here, however, affection or animal attachment towards a place from which he has been removed, or towards other inanimate objects, or anger against an individual with whom he formerly held intercourse, might stimulate him. In order, therefore, to insure any one against the excitement of either anger, affection, or animal attachment, he must not only always have been solitary, but always in one place, and always destitute of objects of care. The appetites, on the other hand, being independent of any external object, arise of themselves, are

⁷ "We should never suffer affection to take root in our hearts before judgment has time to interfere; for in no circumstances of our lives can a hasty and inconsiderate choice be attended with more fatal consequences."—*Cicero, Lælius*.

caused by the condition of the body, and are consequently in operation at some time or other in every individual, whether his state be social or solitary.

7. *Variety of its Manifestation in different Persons and Beings.*

Not only different persons and beings, and also different animals, but the same persons and beings, and the same animals, at different times, are liable to be acted upon, and influenced both by affection and animal attachment in very different ways ; which is correspondingly exhibited according to the efficient causes of such excitement operating in each. The various qualities of this endowment, and the various causes of its excitement, have indeed already been inquired into. On the whole, it will however appear that, while varying in each person and being, the general operation of affection and animal attachment is very different to that of either the emotions or passions, or even of the appetites; inasmuch as it proceeds silently and unseen, although it may be as powerful and influential as that of any of the former. While they resemble the roaring torrent, the flow of the other is like the deep flood.

Nevertheless, although this general characteristic of affection and animal attachment is everywhere the same, and is alike applicable to every being excited by them; yet there is perhaps nothing in which different individuals of the same species vary more from each other, than they do as regards the mode in which they manifest the possession of this endowment. Possibly, indeed, the varieties in which it is exhibited are as extensive among different men as they are among different animals; and as some animals are possessed of affection as well as animal attachment, so some men would seem to possess only animal attachment, and to be destitute of affection. Moreover, while some persons place their affections on objects proper for animal attachment alone, others feel attachment only for objects which ought to excite affection. Even among mankind, it is therefore not unfrequently difficult to determine whether affection or animal attachment is the excitement which really moves us. It is also oftentimes uncertain whether attachment to place or to persons is that which actually endears particular localities to us; and we doubtless occasionally suppose ourselves to be animated by one of those feelings, when it is the other which really influences us. The associations which endear to us our early homes, spring probably from attachment both to persons and to places; our affection for our parents and our recollection of the scenes of youthful happiness, alike contributing to make us love these spots.

One proof that man as well as animals is occasionally excited

by animal attachment merely, instead of affection, even in the case of his own offspring, is afforded by the fact that people who are very fond of their children use them, not as rational beings, but as playthings; and act towards them so as to promote not so much the welfare of the children, as the gratification of the parents: and further than this, which is distinctly characteristic of animal attachment as independent of affection, that when the children grow up and become rational, which ought to increase and perfect instead of decreasing or extirpating real affection, they care little or nothing about them, and even regard them with aversion.

Some persons, as is the case with some animals, are vehemently excited by affection for a brief period, after which it seems to subside, and not to have any longer an influence over them. In others, affection is less vigorous in its operation, although it is more permanent in its duration. In the former case, it will generally be found that the emotions are the ruling influences; while in the latter, the reason alone bears sway, whose decrees do not vary like those of the medial endowments and impulses. Certain people, like certain animals, have affection of a very acute and sensitive kind, which is on all occasions excited, and is openly developed towards those immediately connected with them. Other persons and beings, on the other hand, appear but little influenced by this endowment; all their care and anxiety being concentrated on themselves, and never extending to any external object. Like the cuckoo and the crocodile, they leave those who are most immediately connected with them to the care of strangers, and in some cases, to shift for themselves, without any care at all.

There is, however, in reality no such thing as affection or animal attachment towards oneself alone. From the constitution of this endowment, as has already been demonstrated, it is essential that the object of it be external. Where no such object exists, not self-affection, but selfishness, is that which is the existent and predominant feeling by which we are actuated. Affection is diametrically opposed to selfishness, and selfishness to affection, inasmuch as the object of the one is external, and of the other internal: the tendency of the one, moreover, is to lead us to part with our possessions for the benefit of other persons; while the tendency of the other is to induce us to bestow everything upon ourselves—to make self-gratification the grand object of our existence. Consequently, we observe that those who have no children or near relatives about them, towards whom their affection is called forth, are apt to become selfish, inasmuch as their whole care and concern are centred on themselves. On the other hand, those who possess wives or families, have their affection drawn out from self, and diverted to external objects. Hence, the

possession of children tends more than anything to destroy selfishness, and to develope affection. Nevertheless, although the fact of having children is generally considered to tend more than any other circumstance to eradicate selfishness; yet even here, where it might be thought least likely to be found, selfishness creeps in, and usurps the very place of affection: so that there is in reality nothing in which selfishness is so strongly exhibited as it is in our conduct towards our children. How many acts which we do in regard to them, where we take credit for desiring only their pleasure and welfare, are in reality, if analytically and strictly inquired into, performed solely and entirely for the pleasure and benefit of ourselves! Thus, over-indulgence and spoiling of children, is actually caused, not by our affection towards them, but from selfishness towards ourselves; not from excess of parental fondness, but from an actual deficiency in it. We are induced to pursue such a course, not because it will be beneficial to our children, as reason assures us it will be directly and extensively prejudicial;⁸ but either because such a line is that which affords us the highest immediate gratification, or because it is that which is attended with the least amount of trouble.

It would probably be difficult to define in any case with precision, the exact limits to which the exertion of affection and animal attachment either do, or ought, legitimately to extend. The most just criterion appears to be that which was prescribed by our Lord with respect to the proportion of love which we should bestow upon our neighbour, and whom we are commanded to love as ourselves. Those objects of affection, however, whom we consider, and are affected towards, as an actual part of ourselves, we are apt to feel affection for even greater than we do for ourselves; or, at least, to allow this supposed external portion of ourselves to engross the largest share. But this probably appears to be the case because here alone is affection called into active exercise, which is not and cannot be the case, as regards ourselves. In each instance, nevertheless, the measure of self-love, or self-affection, supplies the fairest regulation for affection towards others.

Perhaps, among persons conjoined together in matrimony, there are exhibited as many gradations and varieties, from the highest excitement of affection down to the lowest feeling of simple attachment, as between persons united by any other kind of connexion or consanguinity. But these varieties in the manifestation of affection, may be exhibited in the case of parents and children, brothers and sisters, and even as regards friends and other social connexions. In each case, the variety in the

⁸ *Dr. Priestley* observes that "the merely fond father never secures the permanent attachment of his child."—*Observations on Education*, p. 93.

display of the endowment in question, will correspond pretty exactly with the causes of its excitement, the circumstances of its development, and the objects towards which it is called forth.

A doubt might be raised whether there is any difference as regards affection, either with respect to its quality or its power, in persons and animals of different sexes; the object of it in the case of offspring being so much closer, and more immediate and direct in the female, than in the male. As regards the quality of affection, it may be presumed to be the same in both sexes; although in the female it is apparently, and perhaps actually more vigorous, from being, from the causes alleged, more directly and more powerfully called forth. Affection appears, consequently, to be stronger in the female sex than in the male, more especially as manifested with respect to the care and protection of offspring, which is the immediate natural result of affection; inasmuch as the connexion between the parent and the offspring is far more close and intimate in the former than in the latter, and the duty of providing for their progeny devolves more on the mother than on the father; by reason of which it is essential that affection should be stronger in her, as there are also more circumstances calculated to call it forth.

The affection of the mother towards the child, is moreover naturally greater than that of the father, inasmuch as the connexion is closer and more obvious between mother and child than between father and child; and the child is more dependent upon the mother, and engrosses more of her attention and care. Affection is also warmer in the child towards the mother than towards the father, both on the foregoing account, and also because towards the father there is a degree of reverence felt, not unmixed with fear, which is not only different from, but to a certain extent opposed to affection.⁹ In the case of male children, as they grow up and become more associated with the father than the mother, receive more aid from him, and their awe of him diminishes; probably their affection, especially that which is resulting, becomes stronger for the father than for the mother. Even in the case of daughters, circumstances may operate to cause resulting affection to be greater towards the father than towards the mother, although natural affection with them is ordinarily most vehement for the latter.

It is doubtless a very benign economy in the constitution of man, more especially as regards its results on his moral nature, that women are incapable of producing children after they have

⁹ "The authority of a father, so useful to our well-being, and so justly venerable upon all accounts, hinders us from having that entire love for him that we have for our mothers, where the paternal authority is almost melted down into the mother's fondness and indulgence."—*Burke, on the Sublime and Beautiful.*

attained middle age; in consequence of which a mother's care and nurture, which is of all education the most valuable, is ordinarily secured to the child, and its moral and mental training is directed and superintended by her affectionate guardianship. Were it otherwise, as in the case of plants in general, and of certain animals, and women were able to go on bearing until near the end of their lives, their children must in many cases be deprived of this natural protection, which is so essential for the due development of their endowments, both mental and moral.

Probably animals possess local, which is a species of animal or inanimate attachment, comparatively stronger than man does; or at any rate, it is more openly manifested in them than in mankind, besides which, fewer circumstances occur to sever its ties: and, on the other hand, they are wanting in much that man possesses, which contributes to cement the bonds of affection through the operation of reason.

If both affection and animal attachment, but more especially the former, appear in some instances to be less strong in man than in animals—which, as has been already shown, is only owing to their being modulated and regulated by other influences;—yet in the case of man they are, or ever ought to be, directed to higher and more extensively beneficial ends; not merely to the physical well-being of the subjects of them, but their mental and moral protection and welfare. In all these cases, and amidst all the varieties in the manifestation of affection and animal attachment, whatever be the exciting causes, the stimulants, or the objects, reason and conscience should ever be our directors and our guides.

8. *Restraint and Discipline of this Endowment.*

Both affection and animal attachment, in common, and equally with many other medial endowments, are not only fully capable of being subjected to the reason and the conscience, but also to general restraint and discipline; and on the efficiency of this control, in the case of intellectual and moral beings, it mainly depends whether their exercise be beneficial or injurious in its results. As in the case of man, affection is both directed and invigorated by the reason; so is it also cultivated and disciplined through this faculty, and an opportunity is afforded for training and guiding it. Although affection when once aroused is too vehement in its operation for its excitement to be stayed, yet a due direction to its impulses may be always given; and although it may be impossible to stem the force of the torrent, it is not difficult to divert its course.

In the case of animals, in whom affection and animal attach-

ment are not directed or invigorated by the reason, but comparatively little opportunity is afforded for the discipline of this endowment; although to a limited extent certain of their instinctive impulses may be made to contribute to this result, in a mode corresponding with what they do to its constitution. Consequently, in their case it is not subjected to any arbitrary or artificial restraint, except such only as the peculiarity of circumstances, and the excitement of counteracting emotions and influences, may afford means for effecting. Nevertheless, as in the following section I have endeavoured to illustrate, in the case of animals as well as men, both affection and animal attachment may become gradually extinguished; and may, as it were, decay through the occurrence of natural events in their career. This endowment may be also to a certain extent both restrained and disciplined by influences of a corresponding nature, through which those moved by them may be detached from the objects of their affection, or their attraction towards them much weakened.

In proportion therefore to the value both of affection and animal attachment in the economy of our nature, and in that of animals also, must be the importance of its due restraint and discipline; more especially as it is the very efficiency of this restraint and discipline which renders affection and animal attachment themselves so beneficial. This regulation is additionally important, inasmuch as, while the appetites are exercised towards external objects, and the passions towards persons who are not necessarily connected with us; affection and animal attachment are evinced towards those who are the most intimately united to us, and whose well-being is so closely associated with our own.

One circumstance which contributes extensively to the restraint of affection and animal attachment, is the distribution of this excitement among several separate objects of it. This is more especially the case with regard to local attachment. On the other hand, the exertion of affection towards the different members of one's own family, might be considered as in reality but a single exercise of this endowment; the objects, although many in number, being only one in point of interest, and all, as it were, constituting members of our own persons.

Another extensive contribution towards the restraint of affection and animal attachment, more especially of the former, is the circumstance that, in a large proportion of cases where this feeling is excited, its exercise is attended with a corresponding sacrifice of self-indulgence, which to a certain extent counteracts and modifies the force of affection. This is fully exhibited in the case of animals, whose efforts to provide for their young entail upon them a multiplicity of trouble, and often danger. In the case of man it exists yet more exten-

sively, although it is less openly displayed; and the cares and anxieties which a family entails in a vast variety of ways, are too obvious to need enumeration. Indeed, the troubles which affection brings upon us, are doubtless among the most anxious and harassing with which human nature is beset.

Both affection and animal attachment are, moreover, in so many instances, liable to encounter counteraction by the emotions, appetites, passions, and desires, and also to be checked by the reason, as alone to curb their operation in several cases. The power that man has over this endowment, appears therefore on the whole, strong as this propensity is, to be very extensive; much more so than that which he possesses over his appetites or passions. This may arise in a great measure from its being of so complex a character, relying on so many circumstances for its subsistence, and requiring so many concurrent feelings to support it; as also being largely dependent on the reason for its continuance, after the causes which originated it have ceased to act.

The fickleness with which man so often places and removes his affections, is also mainly owing to the number of independent contributories which compose this feeling. We seldom see affection broken off instantaneously, but we observe it gradually dissolving, and its constituents vanishing by degrees. Thus the reason first begins to operate in effecting this change; and the individual persuades himself that the kindness or other office which primarily caused the feeling of affection towards the object of it, was not really or voluntarily bestowed; that such object has no just claim, or has forfeited it, for his affection; and thus, link by link, the chain which bound together the different elements of affection becomes broken, and is speedily annihilated.

9. *Its Perversion and Extinction.*

In continuation of the remarks at the termination of the preceding section, I shall bring this chapter to a conclusion by following up the investigation into the causes of the perversion, and also of the extinction, both of affection and animal attachment.

As regards the perversion of this excitement, which is no very rare occurrence, and appears to be more common in the case of man than in that of animals; this may be said to exist whenever either affection or animal attachment are directed towards an object which is not naturally and properly adapted or qualified to excite it. Thus, when that affection which is due to our own offspring or family, is lavished on some inferior object in the creation, perversion of this endowment may be strictly said to exist. This is also the case whenever it is fixed

upon an object which has no claim to it, more especially when it is diverted from one possessing such claim. Whenever, moreover, either affection or animal attachment are unduly excited towards any subject, perversion of them to a greater or less extent exists. The reason in all these cases appears to be mainly at fault, although rather in a negative than in a positive manner. It is not so much that it directs us wrong in the choice of an object of affection or attachment, as that it fails to direct us right, or to direct us at all. Its main error, indeed, is, that it surrenders this direction to the impulse or inclination of the emotions and other medial endowments.

With regard to the extinction and cessation both of affection and animal attachment, it must be observed that all those states and conditions of the mind and of the soul, correspondingly with particular postures and positions of the material frame, which are constrained and painful, and require any special effort to sustain them, gradually wear out by exhaustion; and that all desire or inclination to continue them, by degrees wholly subsides. The emotions, too, by which such a condition was caused, gradually relax and cease to operate. Hence, in many cases, both affection and animal attachment, unless their energies are resuscitated by some new stimulant, gradually become more feeble, and at length die away. We may thus trace the cause of the progressive declination, and ultimate extinction of affection in the case of animals towards their young. In the case of man this excitement, which would otherwise subside, is sustained by the reason, or converted by it into a feeling of friendship; and, in many instances, the offices entailed by it are continued from a sense of duty, or of interest, or of both combined, long after affection itself has ceased to animate us.¹

The most common and efficient cause of the extinction of affection, is the dissolution of the union between the elements which constituted it, already referred to in the preceding section; and which we may observe to be not only effected at the will of the individual, which enables him to restrain these feelings, but also that from this cause they are not unapt of themselves to vanish and disappear from the mind. Hence also do we see not unfrequently the entire cessation of natural affection of the strongest kind, and the nearest ties altogether dissolved.² From this circumstance only, can we account

¹ *Cicero* remarks, with regard to friendships, that, "the longer we preserve them, like those sorts of wine that will bear age, the more relishing and valuable they become."—*Lælius*.

² *Helvetius* says, that considering friendship to originate in reciprocal wants, "it is very difficult for the same wants, and consequently for the same friendship, to subsist for a long course of time." And that "the circumstances in which two friends ought to be found, being once given, and their characters known; if they are ever to quarrel, there is no doubt

for that barbarous feeling, so contrary to what appears to have been by nature implanted in their breasts, which has been displayed towards their infant offspring by many of our own species, who have murdered them to conceal their own infamy. Thus the miserable mother of a spurious progeny persuades herself that it has no claim to her affection or protection; that it is the offspring of another, who has been the cause of her distress; and that it has itself ministered only to her shame, and not to her delight or gratification. Hence it is viewed with feelings of pain and hatred and disgust, which serve utterly to extirpate those of pleasure and fondness and pity and attachment, and those benign emotions which contribute to constitute the feeling of affection; and the hand, which should have been extended only for its protection, is upraised to be weltered in its blood. It appears, moreover, that, both in our own race and also among animals, mothers do not possess so strong an affection for their offspring the first few hours after they are brought forth, as they afterwards do when they have nourished and cherished them as their own, and their sympathies have been fully called into action. Among animals, although in the unnatural way in which the feeling of affection is in certain cases subdued among our own species, it is never so extirpated from their breasts, as they are unable by any similar or corresponding reflections or process of reasoning to effect this result; yet affection appears of itself to dissolve in them as their offspring attain growth sufficient to enable them to provide for themselves, and a new family succeeds to that, which in its turn gives place to another.

Mutual competition for food, in many cases, probably contributes in animals to lessen the feeling of affection between parents and offspring. Among other influences, the necessity of weaning their young to make way for the succeeding family, may also produce this result. In the case of mankind, affection is continued among those who are connected by it, whether natural or acquired, as long as life remains, unless dissolved by some special causes, such as those to which I have alluded; and which a sense of duty, of interest, or of pleasure, will in many instances severally contribute to maintain.

Not only the affections, but the passions, and even the appetites, may probably be not merely indulged, but also enjoyed, and that to the fullest extent, in a future state, when the soul is disunited from the material frame, or united to a spiritualized body. In each case, however, the gratification will be of a purely spiritual nature, although analogous to the

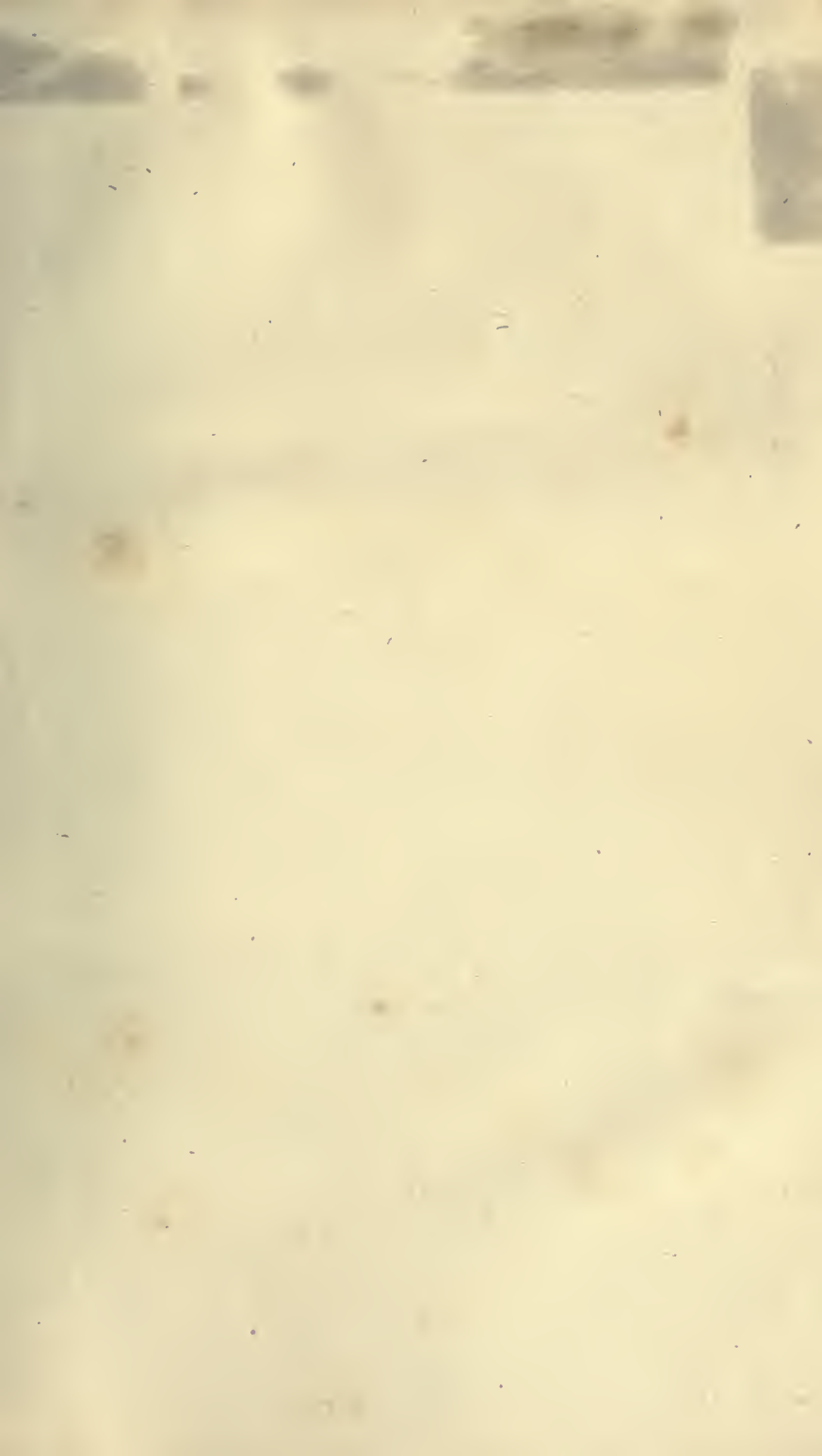
but that a man of penetration, by foreseeing the time when these two men would cease to be reciprocally of use to each other, might calculate the moment when their rupture would happen, as an astronomer calculates the time of an eclipse."—*On the Mind*, c. 14.

pleasures which we now derive through the satisfaction of these medial endowments. Thus the appetites of hunger and thirst, and the emotions excited by their appeasement, may be as completely gratified by the soul taking in knowledge, as they now are by the body imbibing food. The passions may be indulged in pursuits lawful and proper for their exercise; and affection may then, and perhaps then alone, be satiated to the utmost, by an absolute intimacy with, and the enjoyment of the presence of our Creator, at once the purest, the noblest, and the most legitimate object of this endowment.

END OF VOL. I.







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